

# **United States Court of Appeals**

## **For the First Circuit**

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No. 10-1983

PUERTO RICO TELEPHONE COMPANY, INC.,

Plaintiff, Appellant,

v.

TELECOMMUNICATIONS REGULATORY BOARD OF PUERTO RICO;  
SANDRA TORRES-LÓPEZ, in her official capacity as  
President of the Telecommunications Regulatory Board of  
Puerto Rico; GLORIA ESCUDERO-MORALES, in her official  
capacity as Associate Member of the Telecommunications  
Regulatory Board of Puerto Rico; NIXYVETTE SANTINI-HERNÁNDEZ,  
in her official capacity as Associate Member of the  
Telecommunications Regulatory Board of Puerto Rico;  
WORLDNET TELECOMMUNICATIONS, INC.,

Defendants, Appellees.

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No. 10-2028

WORLDNET TELECOMMUNICATIONS, INC.,

Plaintiff, Appellee,

v.

PUERTO RICO TELEPHONE COMPANY, INC.,

Defendant, Appellant,

TELECOMMUNICATIONS REGULATORY BOARD OF PUERTO RICO;  
SANDRA TORRES-LÓPEZ, in her official capacity as  
President of the Telecommunications Regulatory Board of  
Puerto Rico; GLORIA ESCUDERO-MORALES, in her official  
capacity as Associate Member of the Telecommunications  
Regulatory Board of Puerto Rico; NIXYVETTE SANTINI-HERNÁNDEZ,  
in her official capacity as Associate Member of the  
Telecommunications Regulatory Board of Puerto Rico,

Defendants.

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APPEALS FROM THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF PUERTO RICO

[Hon. Bruce J. McGiverin, U.S. Magistrate Judge]

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Before

Torruella, Lipez, and Howard,  
Circuit Judges.

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Eduardo R. Guzmán-Casas, with whom Joe D. Edge and Drinker Biddle & Reath LLP, was on brief for appellant.

Robert F. Reklaitis, with whom Leslie Paul Machado and Leclair Ryan, were on brief for appellees Telecommunications Regulatory Board of Puerto Rico.

Lawrence R. Freedman, with whom Fleischman & Harding LLP, Frank A. Rullán, and Gray Robinson, P.A., was on brief for appellee WorldNet Telecommunications, Inc.

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December 9, 2011

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**TORRELLA, Circuit Judge.** This appeal arises out of negotiations for interconnection<sup>1</sup> between two telecommunications companies -- the incumbent Puerto Rico Telephone Company, Inc. ("PRTC") and its competitor, WorldNet Telecommunications, Inc. ("WorldNet"). After several failed attempts to forge a voluntary interconnection agreement ("ICA") with PRTC, WorldNet filed a Petition for Arbitration with the Telecommunications Regulatory Board of Puerto Rico ("the Board"). PRTC and WorldNet contested hundreds of provisions in the developing agreement before an arbitrator, then continued to contest a subset of those issues before the Board. After the Board issued its decision on the ICA, both sides filed complaints with the district court seeking review of the Board's decision. Following remand from the district court, the Board issued a final ICA between PRTC and WorldNet. Before the district court for a second time, Plaintiff-Appellant PRTC challenged various provisions in that final agreement. The district court granted the Board's motion for summary judgment, with which WorldNet concurred, and dismissed PRTC's complaint with prejudice.

PRTC now appeals, arguing primarily that it has been denied meaningful judicial review, that the end results of the

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<sup>1</sup> "The term interconnection is used by regulators and carriers to refer to the physical linking and use of networks owned by different carriers, to permit customers of one carrier to call customers of another carrier . . ." Rural Iowa Indep. Tel. Ass'n v. Iowa Utils. Bd., 385 F. Supp. 2d 797, 800 n.11 (S.D. Iowa 2005).

Board's rate determinations were unjust and unreasonable, and that several pricing provisions in the final ICA resulted from arbitrary and capricious decisions by the arbitrator and the Board. Finding no reversible error, we affirm.

## I. Background

### A. The Regulatory Context

PRTC and its competitor WorldNet both provide local and long-distance telephone services in Puerto Rico. PRTC was the first telephone company in Puerto Rico, and it historically had a monopoly on local telephone services. See J. Gregory Sidak, Foreign Investment in American Telecommunications 194 (1997).

Other local telecommunications markets in the United States were monopolistically controlled first by the American Telephone and Telegraph Company (AT&T) and then by its "Baby Bell"<sup>2</sup> offspring. Verizon Commc'ns, Inc. v. FCC, 535 U.S. 467, 475-76 (2002); AT&T Commc'ns of Ill., Inc. v. Ill. Bell Tel., 349 F.3d 402, 404 (7th Cir. 2003). By the mid-20th century, AT&T and its satellites "had come to possess overwhelming monopoly power in all telephone markets nationwide, supplying local-exchange and long-distance services as well as equipment." Verizon, 535 U.S. at 480. In 1982, facing an antitrust suit by the Government, AT&T agreed to

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<sup>2</sup> "Baby Bell" is a colloquial term used to refer to one of the Regional Bell Operating Companies that AT&T spun off as part of the 1982 settlement of the United States' antitrust suit against it. See Verizon New England, Inc. v. Maine Pub. Utils. Corp., 509 F.3d 1, 3 (1st Cir. 2007).

a settlement divorcing its long-distance operations from its local-exchange services, retaining the former while birthing the Baby Bells and bequeathing them the latter. See id. at 475-76. The Baby Bells inherited their genitor's monopolistic control over their respective local markets -- the national trust had been busted but local monopolies lived on. See id.

Fourteen years later, seeking to foster competition in the industry, Congress passed the Telecommunications Act of 1996, 47 U.S.C. § 251 et seq. Verizon, 535 U.S. at 476. Among other things, the Act sought to encourage competition in local telecommunications markets<sup>3</sup> by requiring incumbent local-exchange carriers ("ILECs"), such as the Baby Bells and PRTC, to share their facilities and networks with aspiring competitors ("competitive LECs" or "CLECs") in those markets. See 47 U.S.C. § 251(c); Verizon, 535 U.S. at 476. Accordingly, under the mandates of the Federal Telecommunications Act, PRTC is obligated to share elements of its facilities and networks with its competitors, including WorldNet.

These sharing arrangements are effectuated through ICAs between the phone companies. The ICAs establish, among other things, how much a competitive carrier must compensate the

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<sup>3</sup> Congress intended the Act "to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies." Pub. L. No. 104-104, 110 Stat. 56, pmbl. (1996).

incumbent carrier for the use of the incumbent's equipment and networks. If the carriers themselves are unable to successfully negotiate a voluntary agreement, the Act provides that a carrier may petition the governing state commission -- here, the Telecommunications Regulatory Board of Puerto Rico -- to compel arbitration to produce an ICA. See 47 U.S.C. § 252(b). The Board may choose to arbitrate the dispute itself or delegate the authority to do so to an arbitrator. Any ICA forged through compulsory arbitration must be submitted to the Board for approval; the Board may only reject the agreement or individual provisions therein on narrow grounds. See 47 U.S.C. § 252(e)(2)(B); WorldNet Telecomms., Inc. v. P.R. Tel. Co. (WorldNet I), 497 F.3d 1, 5-8 (1st Cir. 2007).

#### **B. Principles Governing Compensation Rates**

The 1996 Act also established principles for determining the rates that incumbent carriers can charge to competitors for use of the incumbents' equipment and networks. Historically, telephone companies had been regulated as monopolistic public utilities. Verizon, 535 U.S. at 477. In order to prevent monopoly power from leading to exorbitant prices, legislatures and administrative agencies became involved in setting the rates utilities could charge consumers, both at the wholesale and retail levels. Id. at 477-78. Regulation of retail prices focused on setting "just and reasonable rates," balancing the utility provider's interest in a

fair return on investment against the public's interest in a fair price for services. See id. at 480-81. Put more bluntly, "[t]he traditional regulatory notion of the 'just and reasonable' rate was aimed at navigating the straits between gouging utility customers and confiscating utility property." Id. at 481 (citing Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944)).

However, determining effective standards for such a balancing test -- with the vague, amorphous goal of achieving "just and reasonable" rates and a "balance" between the interests of the utility and those of consumers -- proved elusive. Over the years, the Supreme Court applied various tests and standards to determine "just and reasonable" prices -- concepts such as the fair-value test, the prudent-investment rule, and price caps. See Verizon, 535 U.S. at 481-88. The constant underlying those standards was the idea that calculating the utility's cost "and then allowing a fair rate of return on it was a sensible way to identify a range of rates that would be just and reasonable to investors and ratepayers." See id. at 487-88. Under this rate-of-return model, a utility had a strong incentive to inflate its costs and to make costly but unnecessary investments, in order to raise its "rate base" and thus increase its incomes. See id. at 488.

The Telecommunications Act of 1996, however, "appears to be an explicit disavowal" of this rate-of-return model. Verizon, 535 U.S. at 489. Under the Act, "Congress called for rate making

different from any historical practice, to achieve the entirely new objective of uprooting the monopolies that traditional rate-based methods had perpetuated. . . . in favor of novel ratesetting designed to give aspiring competitors every possible incentive to enter local retail telephone markets, short of confiscating the incumbents' property." *Id.* at 488-89. The Act does retain references to the goal of achieving "just and reasonable" and nondiscriminatory rates. See 47 U.S.C. § 252(d)(1) (providing that "[d]eterminations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment" shall be "nondiscriminatory" and "based on the cost . . . of providing the interconnection or network element," and "may include a reasonable profit"). However, the Act is "radically unlike all previous statutes in providing that rates be set 'without reference to a rate-of-return or other rate-based proceeding.'" Verizon, 535 U.S. at 489 (quoting 47 U.S.C. § 252(d)(1)(A)(I)).

Now prohibited from depending on rate-of-return or any other rate-based method of setting prices, the Federal Communications Commission ("FCC") chose instead to treat "cost" for purposes of § 252(d)(1)(A)(I) as "forward-looking economic cost," based on the "total element long-run incremental cost" ("TELRIC") of each element and a reasonable allocation of forward-looking common costs (for those costs that "cannot be attributed directly to individual elements"). Verizon, 535 U.S. at 495 (quoting 47

C.F.R. § 51.505). The FCC further specified that TELRIC itself "should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the [ILEC's] wire centers." 47 C.F.R. § 51.505(b)(1).

Therefore, the Act still requires state commissions to determine "just and reasonable" rates for interconnection agreements. 47 U.S.C. § 252(d)(1). However, the Act does not stop there. It further specifies how state commissions must determine such "just and reasonable" rates. Such rates shall be "based on the cost" of providing the individual network elements, and this "cost" shall in turn be "determined without reference to" traditional rate-of-return or rate-based methods. Id. § 252(d)(1)(A)(I). Exercising its remaining discretion within these constraints, see Verizon, 535 U.S. at 495, the FCC further defined this "cost" as "forward-looking," and provided that the cost shall be determined through the TELRIC methodology, which assumes a "forward-looking cost over the long run" as well as a "lowest cost network configuration" that uses "the most efficient telecommunications technology currently available." 47 C.F.R. § 51.505. The Supreme Court has upheld this TELRIC methodology as a reasonable exercise of the FCC's discretion. See Verizon, 535 U.S. at 523 ("TELRIC appears to be a reasonable policy for now, and

that is all that counts.") (citing Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 866 (1984)).

Accordingly, under the 1996 Act, the FCC has adopted TELRIC as the new standard for determining "just and reasonable" rates. U.S. Telecom Ass'n v. FCC, 359 F.3d 554, 561 (D.C. Cir. 2004). The Supreme Court has noted that the FCC's treatment of "cost" as "forward looking" is "something distinct from the kind of historically based cost generally relied upon in valuing a rate base after Hope Natural Gas." Verizon, 535 U.S. at 495. Thus, the FCC's TELRIC methodology -- which presumes a "forward-looking," "most efficient," and "lowest cost" hypothetical network in the local market, 47 C.F.R. § 51.505(b) -- represents a significant break from traditional rate-setting models. See Verizon, 535 U.S. at 495. Furthermore, in Verizon, the Supreme Court upheld the FCC's TELRIC methodology, id. at 523, 539, noting that "it was the very point of Hope Natural Gas that regulatory bodies required to set rates expressed in [terms of 'just and reasonable' rates] have ample discretion to choose methodology." Id. at 500.

### **C. Facts and Procedural History**

In October 2006, WorldNet formally requested to negotiate an ICA with PRTC. As negotiations faltered, WorldNet filed a Petition for Arbitration with the Board to resolve 374 issues then outstanding regarding the agreement. The Board opened an arbitration proceeding; meanwhile, WorldNet and PRTC resolved many

of the disputed issues, ultimately submitting approximately 200 issues to the arbitrator. The arbitrator considered over 1,000 pages of written direct and rebuttal testimony from twenty fact witnesses and eight expert witnesses. The arbitrator also held a hearing from May 22 through May 25, 2007, that included opening statements, cross-examination of witnesses, and closing arguments. The arbitrator resolved the outstanding issues in a ruling issued on July 2, 2007.

After the arbitrated ICA was approved by the Board on November 2, 2007, both parties sought reconsideration by the Board of several aspects of that agreement. Following the resolution of these various motions for reconsideration, PRTC and WorldNet then each sought judicial review of the ICA and the Board's determinations, appealing twenty-five issues to the district court. On August 25, 2009, the district court issued an Amended Opinion and Order on these issues -- the court affirmed the Board's decision on seventeen issues,<sup>4</sup> vacated the Board's decision and

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<sup>4</sup> The seventeen issues on which the district court affirmed the Board's decision are: liquidated damages, performance standards, mixed bundles, OSS access (download, upload, and batches OSS access), OSS access (access to OSS systems interfaces), transit traffic rates, depreciation inputs, cost of capital, maintenance and operations factors, buried drop costs, direct fed buildings, cable sizes, fiber structure costs (trenching versus excavation), fiber structure costs (paving), non-recurring rates (fall-out rates), non-recurring rates (dispatch occurrence frequency), and rates for local loops.

reinstated the arbitrator's decision on four issues,<sup>5</sup> and vacated and remanded another four issues<sup>6</sup> to the Board for further consideration. WorldNet Telecomms., Inc. v. Telecomms. Regulatory Bd. of P.R. (WorldNet III), 707 F. Supp. 2d 163, 216 (D.P.R. 2009).

Following the remand, the Board issued an order on November 9, 2009 that included the Board's determinations on the four remanded provisions of the ICA. Before the district court for a second time, PRTC appealed the Board's determinations on two of the remanded provisions. All the parties then moved for summary judgment; WorldNet concurred with the Board, adopting the Board's statement of facts and all of its positions and arguments. The district court granted the Board's motion for summary judgment and dismissed PRTC's supplemental complaint with prejudice. See WorldNet Telecomms. v. Telecomms. Regulatory Bd. of P.R. (WorldNet IV), Civil Nos. 08-1360 (BJM), 08-1359 (BJM), slip op. at 12 (D.P.R. July 20, 2010).

PRTC now appeals various aspects of the district court's two decisions. First, PRTC challenges the Board's authority to include a liquidated damages provision in the ICA. PRTC then

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<sup>5</sup> The four issues as to which the district court vacated the Board's decision and reinstated the arbitrator's decision are: collocation construction schedule, NID and block terminal costs, circuit demand, and value of land.

<sup>6</sup> The four issues as to which the district court vacated the Board's decision and remanded to the Board for further proceedings are: transit traffic, collocation construction, collocation price quotation response, and structure sharing.

challenges the determinations of various cost measures and pricing inputs, including nine determinations on which it lost at the district court and one determination on which it prevailed. These cost measures and pricing inputs are used to determine the ultimate rates that WorldNet must pay PRTC for the use of PRTC's equipment and facilities. Accordingly, PRTC generally argues that these costs will be higher than determined by the district court, and thus that WorldNet should pay PRTC higher rates. WorldNet, in contrast, argues that the lower costs, and resulting lower rates, determined by the arbitrator and the Board and upheld by the district court are correct.

## **II. Standard of Review**

Because judicial review here is based on the agency record, we apply the "ordinary review standards" to agency determinations, "accepting the district court decision merely as it may be persuasive." Centennial P.R. License Corp. v. Telecomms. Regulatory Bd. of P.R., 634 F.3d 17, 26 (1st Cir. 2011) (quoting WorldNet I, 497 F.3d at 5), reh'g denied, No. 10-1091 (1st Cir. Mar. 21, 2011), cert. denied, No. 10-1531, 565 U.S. \_\_ (Oct. 3, 2011).

### **A. Questions of Law**

We "review the Board's interpretations of federal and state law de novo." Centennial, 634 F.3d at 26. Though "it is customary where any doubt exists to give some deference to the

agency charged with administering the statute," *id.* (quoting WorldNet I, 497 F.3d at 11) (internal quotation marks omitted), this deference is only extended to the Board's interpretations of the Puerto Rico Telecommunications Act,<sup>7</sup> not the Board's interpretations of the Federal Act. See WorldNet I, 497 F.3d at 11; Global NAPs, Inc. v. Verizon New Eng., Inc. (Global NAPs III), 444 F.3d 59, 70 (1st Cir. 2006). Determinations by the Board that rest principally on an interpretation of the Federal Act are subject to de novo review. Global NAPs III, 444 F.3d at 70.

#### **B. Questions of Fact and Policy**

"[W]here no error of law exists, the state agency's other determinations are reviewed under the arbitrary and capricious standard." Centennial, 634 F.3d at 27 (internal quotation marks omitted) (quoting Global NAPs, Inc. v. Verizon New Eng., Inc. (Global NAPs I), 396 F.3d 16, 24 n.8 (1st Cir. 2005)). Accordingly, the Board's determinations as to facts, policy, and the application of general standards are subject to the deferential arbitrary and capricious standard. See Centennial, 634 F.3d at 26; WorldNet I, 497 F.3d at 5. Under this standard, "an agency's decision will be upheld unless 'the agency lacks a rational basis for making the determination or if the decision was not based on consideration of the relevant factors.'" Centennial, 634 F.3d at

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<sup>7</sup> Puerto Rico Telecommunications Act of 1996, 27 L.P.R.A. § 265 et seq., commonly referred to as Law 213.

37 (quoting River St. Donuts, LLC v. Napolitano, 558 F.3d 111, 114 (1st Cir. 2009)). "Review under the arbitrary and capricious standard is narrow and this Court may not substitute its judgment for that of the agency, even if it disagrees with the agency's conclusions." River St. Donuts, 558 F.3d at 114. The agency's actions are presumed to be valid; if the agency's decision is supported by a rational basis,<sup>8</sup> we will affirm. Id.

### C. When the Board Reviews an Arbitrated ICA

When the Board reviews an ICA arrived at through compulsory arbitration,<sup>9</sup> the Federal Act limits the Board's options on review: the Board may only reject the ICA (or individual

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<sup>8</sup> An agency lacks a rational basis for a decision if, for example, "the agency relied on improper factors, failed to consider pertinent aspects of the problem, offered a rationale contradicting the evidence before it, or reached a conclusion so implausible that it cannot be attributed to a difference of opinion or the application of agency expertise." Associated Fisheries of Maine, Inc. v. Daley, 127 F.3d 104, 109 (1st Cir. 1997) (citing Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Ins. Co., 463 U.S. 29, 43 (1983)).

<sup>9</sup> The compulsory arbitration provided for under the Telecommunications Act is more akin to administrative adjudication than to the sort of voluntary commercial arbitration to which courts generally grant significant deference under the Federal Arbitration Act ("FAA"), 9 U.S.C. § 1. The FAA, and the jurisprudence applying the FAA, applies to a "written provision in . . . a contract . . . to settle by arbitration a controversy thereafter arising out of such contract or transaction." Id. § 2. Such arbitration is therefore a creature of contract. By contrast, "interconnection agreements are not ordinary commercial contracts: the Act dictates their creation; they are imposed by involuntary arbitration and agency review if the parties cannot agree; and their aim is to secure the public benefit of competition." WorldNet I, 497 F.3d at 7.

provisions therein) on specified grounds. See WorldNet Telecomms., Inc. v. Puerto Rico Tel. Co. (WorldNet II), 497 F.3d 13, 14 (1st Cir. 2007) (citing 47 U.S.C. § 252(e)(2)). The Board must accept ICA provisions that are consistent with Sections 251 and 252(d) of the Act, unless the Board reasonably finds that the ICA conflicts with Puerto Rico statutes, the Board's rules, or the Board's policy determinations. WorldNet I, 497 F.3d at 7. For the Board to reject an ICA provision based on Board policy, there must be a conflict with general policies "that the Board would follow in other situations," and not simply with the Board's "ad hoc preferences." Id. at 7-8. These determinations by the Board -- including its findings of fact and applications of the law in resolving disputes over the terms of an ICA -- are reviewed under the arbitrary and capricious standard. Centennial, 634 F.3d at 26-27. Accordingly, when the Board reviews an arbitrated ICA for consistency with law and policy, this court reviews questions of law addressed in the Board's review de novo, see Global NAPs III, 444 F.3d at 70, and all of the Board's other determinations under an arbitrary and capricious standard, see Centennial, 634 F.3d at 26-27; however, the focus of our review is always on the Board's exercise of its limited authority to affirm or reject the

arbitrated ICA, and not on the arbitrator's particular cost determinations, see WorldNet I, 497 F.3d at 7.<sup>10</sup>

### **III. Discussion**

#### **A. Liquidated Damages**

In its brief, PRTC argues that under Puerto Rico law, the Board lacks the authority to impose liquidated damages provisions in an arbitrated ICA between two telecommunications carriers. At oral argument, however, PRTC acknowledged that we previously decided this exact issue in the Centennial case. See Centennial, 634 F.3d at 31.<sup>11</sup>

Indeed, Centennial examined in depth PRTC's argument that the Board lacks the power to impose liquidated damages provisions. See id. at 27. Dismissing PRTC's argument as being contrary to "binding precedent," the Centennial Court noted that "the fundamental holding of [WorldNet I] is that an arbitrated interconnection agreement may contain liquidated damages provisions

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<sup>10</sup> PRTC raises the concern that this framework prevents any review of arbitrary and capricious decision-making by an arbitrator, whether by the Board or by federal courts. This is not the case. Cost determinations that are completely unmoored from the evidence before the arbitrator are inconsistent with law insofar as the Act requires that rates set by an ICA be based on the actual costs of providing the service and/or the retail rates charged to subscribers. See 47 U.S.C. § 252(d). Additionally, arbitrary and capricious determinations would presumably also violate Board policy and may be rejected on this alternate ground. See WorldNet I, 497 F.3d at 7-8.

<sup>11</sup> The Centennial case was decided after the conclusion of briefing in this case, but before oral argument.

that are designed to create incentives or to approximate costs and are inserted over the objection of one of the parties." Id. at 28.

Accordingly, PRTC's argument is "foreclosed by [WorldNet I]: Puerto Rico law does not prohibit liquidated damages provisions in arbitrated interconnection agreements." Id. at 29. Summarizing its holding on this issue, the Centennial Court concluded as follows:

As [WorldNet I] makes clear, incentive-based or cost-based liquidated damages -- at least as far as interconnection agreements go -- are permissible under Puerto Rico law. Accordingly, we reaffirm our holding in WorldNet that Puerto Rico law does not prevent the inclusion -- whether voluntarily negotiated, imposed by an arbitrator, or imposed by the Board -- of incentive- or cost-based liquidated damages in interconnection agreements between telecommunications carriers.

Id. at 31. Because PRTC's arguments on this issue are foreclosed by explicit, binding precedent in WorldNet I and Centennial, we affirm the determination of the Board as to liquidated damages in the ICA.

#### **B. Just and Reasonable Rates**

Under the Telecommunications Act, PRTC is entitled to be paid "just and reasonable" rates for its services. 47 U.S.C. § 252 (d) (1). PRTC argues that the Board made unjust and unreasonable determinations with respect to two figures: Total Cable and the Local Loop Rate. The "Total Cable" or "Cable Size" figure is the total quantity of cable in the hypothetical, forward-looking, most

efficient, least cost network. The "Local Loop rate" or "rate for local loops" refers to the rate that PRTC can charge WorldNet for the wires and cable used to connect the network to a customer's home or business.<sup>12</sup> In both cases, PRTC argues that the end result of the Board's methodology was an unjust and unreasonable rate.<sup>13</sup> Further, PRTC argues that the district court deprived it of meaningful judicial review by failing to evaluate the reasonableness of the end results of the Board's determinations, and instead focusing on the Board's methodology. We disagree.

Citing a line of cases following Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944), PRTC asserts that when assessing whether rates are "just and reasonable," the focus must be on the reasonableness of the impact of the result, and not the reasonableness of the theory or methodology employed.<sup>14</sup> PRTC

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<sup>12</sup> The Appendix of this opinion contains a table of key technical terms.

<sup>13</sup> Specifically, PRTC argues that for Total Cable, "the result of the Board's methodology was unjust and unreasonable because it produced an amount of cable for the hypothetical network that was simply insufficient to serve the entire island of Puerto Rico." For Local Loop Rate, PRTC maintains that the result "was unjust and unreasonable when compared with average loop rates across the United States and other benchmarks."

<sup>14</sup> See, e.g., Hope Natural Gas Co., 320 U.S. at 602 ("Under the statutory standard of 'just and reasonable' it is the result reached not the method employed which is controlling. It is not theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the Act is at an end. The fact that the method employed to reach that result may contain infirmities is not then important.").

maintains that the Board and the district court must not only ask whether each individual element or cost input was determined appropriately, but must also undertake another inquiry: whether the final interconnection compensation rates -- the aggregate or "end results" of all the intermediary components of the equation -- are "just and reasonable." WorldNet and the Board argue that the first inquiry determines the latter -- that is, whether a rate is "just and reasonable" is determined solely by asking whether each individual component was determined appropriately under the governing law.

As a preliminary matter, we note that Total Cable is not a "rate" at all, but rather an individual network element used in calculating rates -- it refers to the total quantity of cables in the hypothetical network. Thus, as a pricing input and intermediary determination, Total Cable is not properly subject to challenge as violating PRTC's asserted statutory right to a "just and reasonable rate." 47 U.S.C. § 252(d)(1) (emphasis added). Nor is the Total Cable figure properly subject to constitutional challenge as an unconstitutional taking: a taking analysis focuses on the result of a rate calculation, rather than on the inputs to the calculation. Cf. Verizon, 535 U.S. at 525 ("[T]he general rule is that any question about the constitutionality of rate setting is raised by rates, not methods . . ."). Thus, only the Local Loop Rate remains relevant for PRTC's "just and reasonable" arguments;

we will review the Board's determination as to Total Cable with the Board's other network element determinations. See § D(6), infra.

Additionally, we note that although PRTC collapses the two inquiries into one analysis in its brief, its argument on the "just and reasonable" issue actually encompasses two related but analytically distinct claims: (1) a statutory claim to "just and reasonable" rates, and (2) a constitutional claim grounded in the Takings Clause of the Fifth Amendment.<sup>15</sup> We begin with the statutory claim.

As noted in Section I.B, supra, the 1996 Act created a new framework for determining the rates that an ILEC could charge a competitor for interconnection. The 1996 Act still requires "just and reasonable" rates, but the phrase now carries a different meaning -- and requires a different standard -- than it did under the old regulatory regime. PRTC's choice of cases to cite in support of its argument makes this distinction clear. Tellingly, only two of the cases cited by PRTC in support of its argument on

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<sup>15</sup> Historically, in the utility rate-setting context, courts applied the same standards when evaluating both statutory and constitutional claims to "just and reasonable" rates. See, e.g., Jersey Cent. Power & Light Co. v. FERC, 810 F.2d 1168, 1175 (D.C. Cir. 1987) (noting that both the Federal Power Act and the Natural Gas Act of 1938 require that rates be "just and reasonable"; that "courts rely interchangeably on cases construing each of these Acts when interpreting the other"; and that the "just and reasonable" standard prescribed by the statutes coincides with the constitutional standard). However, as described infra, the Telecommunications Act of 1996 changed the standard for "just and reasonable" rates in the telecommunications industry. Thus, here it is necessary to analyze the two inquiries separately.

this issue were decided after the passage of the 1996 Act; moreover, those two citations only relate to the takings issue, not the statutory interpretation question. See Verizon, 535 U.S. at 523-28 (rejecting the incumbent carriers' claim that TELRIC methodology will lead to an unconstitutional taking); Rural Iowa Indep. Tel. Ass'n, 385 F. Supp. 2d at 826-28 (dismissing the incumbent carrier's takings claim as "fatally premature" because the Iowa Utilities Board had not set applicable rates in any of its decisions, and the ILEC and CLEC had not yet obtained a reciprocal compensation agreement). The other "just and reasonable" cases cited by PRTC<sup>16</sup> predate the 1996 Act and apply precisely the type of "rate-of-return" or "rate-based" standards that the 1996 Act expressly prohibits.<sup>17</sup> See Verizon, 535 U.S. at 489 (noting that the 1996 Act is "radically unlike all previous statutes in providing that rates be set 'without reference to a rate-of-return or other rate-based proceeding'") (quoting 47 U.S.C. § 252(d) (1) (A) (I)); see also Verizon New England, Inc., 509 F.3d at 9

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<sup>16</sup> The other cases cited by PRTC as support for its position include: Duquesne Light Co. v. Barasch, 488 U.S. 299, 310 (1989); Hope Natural Gas Co., 320 U.S. at 602; Tenoco Oil Co. v. Dep't of Consumer Affairs, 876 F.2d 1013, 1020 (1st Cir. 1989); and Jersey Cent. Power & Light Co., 810 F.2d at 1175-78.

<sup>17</sup> Accordingly, our prior statement in Tenoco Oil -- that "[t]o be just and reasonable, rates must provide not only for a company's costs, but also for a fair return on investment," 876 F.2d at 1021 -- is no longer an accurate statement of the law in the context of rates between telecommunications carriers in an arbitrated ICA under the Telecommunications Act of 1996.

(contrasting the potentially higher, traditional "just and reasonable" rates with the lower TELRIC rates "which are highly favorable to the competitors").

PRTC does have a statutory right to "just and reasonable" rates under the 1996 Act; however, the Act and the FCC's rules further specify how such "just and reasonable" rates are to be determined -- by determining the cost of the individual network elements using TELRIC. Here, by applying the TELRIC methodology to determine the cost of interconnection and individual network elements, the arbitrator and the Board followed the procedures required by the 1996 Act and the FCC rules in order to arrive at "just and reasonable" rates under the Act. Accordingly, PRTC's statutory claim on this issue fails.

Having addressed PRTC's statutory claim, we must still address its constitutional claim. Yet the very cases PRTC relies upon undermine its constitutional claim, articulating standards that PRTC fails to meet.

In Hope Natural Gas, the Supreme Court noted that an agency's rate order is "the product of expert judgment which carries a presumption of validity," and "he who would upset the rate order under the Act carries the heavy burden of making a convincing showing that it is invalid because it is unjust and unreasonable in its consequences." 320 U.S. at 602. In Duquesne Light, the Supreme Court reviewed the "guiding principle" that the

Takings Clause of the Fifth Amendment<sup>18</sup> protects utilities from being restricted to rates that are "so 'unjust' as to be confiscatory." 488 U.S. at 307; see also Fed. Power Comm'n v. Texaco Inc., 417 U.S. 380, 391-92 (1974) ("All that is protected against, in a constitutional sense, is that the rates fixed by the Commission be higher than a confiscatory level."); Federal Power Comm'n v. Natural Gas Pipeline Co. of Am., 315 U.S. 575, 585 (1942) ("By long standing usage in the field of rate regulation, the 'lowest reasonable rate' is one which is not confiscatory in the constitutional sense."). As the Eleventh Circuit has noted, "[c]ases like Duquesne Light stand for the proposition that rates can be regulated so long as they are not so 'unjust' as to be confiscatory, and within this range the regulatory agency has broad discretion." Ala. Power Co. v. FCC, 311 F.3d 1357, 1367 (11th Cir. 2002). The Supreme Court has also defined the phrase "so unjust as to be confiscatory" as a rate that "threaten[s] an incumbent's 'financial integrity.'" Verizon, 535 U.S. at 524 (quoting Duquesne Light, 488 U.S. at 307).

Therefore, we examine PRTC's constitutional claim to determine whether PRTC has demonstrated that the Local Loop Rate is so unjust as to be confiscatory -- that is, whether the Local Loop

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<sup>18</sup> "The Takings Clause of the Fifth Amendment applies to the states and to Puerto Rico through the Fourteenth Amendment." Fideicomiso de la Tierra del Caño Martín Peña v. Fortuño, 604 F.3d 7, 12 (1st Cir. 2010).

Rate threatens PRTC's financial integrity. See Verizon, 535 U.S. at 524. Here, PRTC makes no such showing. In its brief, PRTC makes only the most cursory of arguments on this point, asserting merely that the Local Loop Rate "was unjust and unreasonable when compared with average loop rates across the United States and other benchmarks." Relying entirely on this one-sentence, naked assertion on appeal,<sup>19</sup> PRTC falls far short of meeting its "heavy burden" of showing that the Local Loop Rate threatens its financial integrity. See Hope Natural Gas Co., 320 U.S. at 602; Ill. Bell Tel. Co. v. FCC, 988 F.2d 1254, 1263 (D.C. Cir. 1993). Thus, PRTC has failed to demonstrate an unconstitutional taking.

### C. Mixed Bundles

A "mixed bundle" is a packaged resale product containing both telecommunications and non-telecommunications services. At issue are the appropriate wholesale rates that PRTC will charge WorldNet for products that PRTC currently retails to its own customers in mixed bundles. As a hypothetical illustration, PRTC might charge its retail customers \$30 for a home phone line, \$10

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<sup>19</sup> PRTC's argument before the district court on this issue was similarly underdeveloped. The district court noted that the section of PRTC's brief challenging the Local Loop Rate "does not include a single citation to the decisions of the Board or arbitrator that would allow the court to locate and review the decisions that PRTC seeks to overturn." WorldNet III, 707 F. Supp. 2d at 215. As a result, the district court was "unable to locate the Board's discussion of this issue among any of the myriad Board orders included in the Joint Appendix." Id. "Moreover," the court noted, "the issue is not mentioned or cited directly in PRTC's complaint." Id. at 215 n.19.

for cable television, and a "mixed bundle" consisting of both phone and cable services for a discounted retail price of \$30 (a 25 percent discount). Here, the arbitrator determined that PRTC must offer each service individually to WorldNet at a price reflecting the 25 percent discount, but then also apply the parties' standard wholesale discount on top of the already-discounted "mixed bundle" price. PRTC challenged this "double-discounting," and the Board agreed, overruling the arbitrator on this issue. The Board found that PRTC need offer only two options to WorldNet: either the wholesale discount for each individual service, or the 25 percent mixed bundle discount for the services together.

In overruling the arbitrator, the Board noted that the arbitrator's mixed bundles pricing provision had "established a principle of law that had not yet been considered by the Board or the FCC." The Board noted that "[a]s a general matter, we continue to believe, as we did in the 2002 PRTC-Newcomm arbitration, that the Arbitrator should not break new ground, but should apply principles of law that have already been established."

On review, the district court examined whether the Board's reversal of the arbitrator's decision was proper. The district court opined that "[i]t is not clear" that the pricing provision imposed by the arbitrator was "inconsistent" with the Act: "it may not be required by the Act, but it also may not violate the Act." WorldNet III, 707 F. Supp. 2d at 184.

Nonetheless, the court found that it did not need to decide whether the provision was inconsistent with the Act, because the Board may also overturn an arbitrated provision that conflicts with Board policy. See id. (citing WorldNet II, 497 F.3d at 7). The court reasoned that "[i]t seems eminently reasonable for the Board to enforce a policy that the Arbitrator should not break new ground, but should apply principles of law that have already been established." Id. (internal quotation mark omitted). Because the arbitrated solution broke new ground, the district court affirmed the Board's decision. Id.

Although PRTC prevailed on the mixed bundles issue, it argues that the district court was wrong to even suggest that WorldNet's "mixed bundles" proposal might be consistent with the Communications Act. In PRTC's view, WorldNet's proposal was clearly inconsistent with the Communications Act. WorldNet responds that since PRTC prevailed below, it is seeking an improper advisory opinion from this court.<sup>20</sup> On the merits, WorldNet argues that its mixed bundles proposal was not inconsistent with the Act.

As a general rule, "[a] party may not appeal from a judgment or decree in his favor." Elec. Fittings Corp. v. Thomas & Betts Co., 307 U.S. 241, 242 (1939). However, under some

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<sup>20</sup> Federal courts have "neither the power 'to render advisory opinions nor to decide questions that cannot affect the rights of litigants in the case before them.'" Preiser v. Newkirk, 422 U.S. 395, 401 (1975) (quoting North Carolina v. Rice, 404 U.S. 244, 246 (1971)).

circumstances, a prevailing party may appeal a court's determination on a legal question if that determination could affect the party's rights in the future. See, e.g., id. (allowing victorious defendants in patent infringement suit to appeal to eliminate from the decree the finding that the patent, though not infringed, was valid). Here, PRTC claims that the district court's statement is affecting its rights, pointing to a recent decision by the Board in a separate ICA proceeding between PRTC and WorldNet in which the Board adopted WorldNet's mixed bundle proposal.<sup>21</sup>

We will not address the merits of this question because there was no legal determination below at all, much less a determination that could affect PRTC's rights. The district court's language clearly expressed that it was not deciding whether WorldNet's proposal was inconsistent with the Act. Thus, the district court's statement that WorldNet's proposal may or may not be consistent with the Federal Telecommunications Act was mere dicta that could not have any binding effect for future proceedings. To rule on that question now would be a paradigmatic example of an advisory opinion. This we may not do.<sup>22</sup>

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<sup>21</sup> See Report and Order, Appx. B, Issue 152, In re WorldNet Telecomm'n's., Inc., No. JRT-2010-AR-0001 (TRB Sept. 2, 2010).

<sup>22</sup> If in fact the Board has relied on the district court's dicta in a separate ICA proceeding, the proper place to challenge that reliance is in that proceeding.

#### **D. The Arbitrator's Determinations that the Board Affirmed**

The Supreme Court noted that the Verizon record "suggests that TELRIC rate proceedings are surprisingly smooth-running affairs, with incumbents and competitors typically presenting two conflicting economic models supported by expert testimony, and state commissioners customarily assigning rates based on some predictions from one model and others from its counterpart."  
Verizon, 535 U.S. at 522. The record before us suggests the same. Nonetheless, PRTC now complains of four cost determinations by the arbitrator that were affirmed by both the Board and the district court, and two cost determinations by the Board that were affirmed by the district court.

In the absence of errors of law, we review these determinations under the deferential arbitrary and capricious standard. See Centennial, 634 F.3d at 26-27. In reviewing cost determinations by the arbitrator that were upheld by the Board, we focus on whether the Board properly exercised its authority to affirm the arbitrator's decision. See WorldNet I, 497 F.3d at 7. In reviewing the Board's own pricing determinations, we may not substitute our judgment for that of the Board, whose determinations are presumed to be valid. See River St. Donuts, 558 F.3d at 114. Unless the Board lacked a rational basis for a determination, we will affirm. See id. We examine each determination in turn.

## **1. Buried Drops / Buried Conduit**

Buried Conduit refers to an input to the cost model based on the cost of placing the buried wire that connects customers to the PRTC network. Here, PRTC proposed a figure assuming it would place such buried wires into conduits 100 percent of the time. WorldNet's proposal assumed the use of conduits 10 percent of the time. The arbitrator determined that the correct assumption should be 25 percent, referencing Board policy requiring conduit drops only for new urban subdivisions and developments and not for rural areas. PRTC argues that this determination is arbitrary and capricious, because there is no support for the Board's conclusion that the arbitrator's determination was "consistent with the Board's policy to require conduit for urban sub-divisions and development projects but not to require conduit in rural areas of Puerto Rico."

PRTC's argument on this buried conduit issue is confined to a single paragraph in its brief. PRTC has fallen far short of meeting its burden of demonstrating that "the agency relied on improper factors, failed to consider pertinent aspects of the problem, offered a rationale contradicting the evidence before it, or reached a conclusion so implausible that it cannot be attributed to a difference of opinion or the application of agency expertise."

Associated Fisheries, 127 F.3d at 109.

This case is different from the cases relied on by PRTC on this issue, Laclede Gas Co. v. Federal Energy Regulatory Commission, 873 F.2d 1494 (D.C. Cir. 1989), and South Dakota Public Utilities Commission v. Federal Energy Regulatory Commission, 668 F.2d 333 (8th Cir. 1981). In Laclede, FERC's initial order simply made an assertion that the company's customers were protected by a refund obligation. 873 F.2d at 1499. "After a number of commenters challenged that conclusion on rehearing, FERC merely repeated its assertion, again without analysis." Id. In contrast, here the arbitrator sought a compromise between the parties' positions, and cited Board policy that rural areas do not require conduit.

In South Dakota Public Utilities Commission, the Eighth Circuit held that FERC had ignored estimates and data presented before it, and had instead chosen a formula for estimating gas reserves that was significantly inferior to another formula at FERC's disposal, which the agency ignored. 668 F.2d 344-45. The court found that the alternative predictions that were not chosen were made by "one of the most respected analysts in the natural gas industry and its projections are well in line with those of other groups." Id. at 344. But "without any apparent rational basis, [FERC's chosen] model totally eliminates the [respected model's] speculative category and then reduces the remainder by 300 percent." Id. Moreover, the court held that the FERC's chosen

model "ignore[d] current governmental policies expressed in the Natural Gas Policy Act." *Id.* at 341. Thus, in the South Dakota Public Utilities Commission case it was clear that FERC had ignored one available and reliable model in favor of a dramatically different model that was "without support in the record and [was] not within the zone of reasonableness." *Id.* at 344.

In contrast, here the arbitrator was choosing between two presumably self-serving estimates presented by the parties: 100 percent by PRTC, and 10 percent by WorldNet. Unlike in South Dakota Public Utilities Commission, the estimate that was not chosen here had not been made by "one of the most respected analysts" in the industry, and the projections were not "well in line with those of other groups." See *id.* Moreover, the arbitrator's decision conforms with the Board's general policy that conduit is not required in rural areas. Therefore, the Board's decision to affirm the arbitrator's determination as consistent with law and policy was not arbitrary and capricious.

## **2. Cost of Capital**

The Weighted Average Cost of Capital ("WACC") determines the level of return to investment contained within prices that an ILEC is expected to earn. It is often referred to as the company's "rate of return." A WACC calculation includes a determination of the "beta" factor, which estimates the risk of investing in a particular company by measuring the volatility of its stock as

compared to the market as a whole. PRTC argued for a beta value of 1.12, representing the average beta value of all ILECs nationwide. WorldNet proposed a lower figure, based on PRTC-specific data. Instead of choosing either PRTC's or WorldNet's proposals, the arbitrator adopted a beta value of 1.0, representing the average beta value of S&P 500 companies. This was the same beta value the FCC had used in 2003 in deciding an ICA dispute between two carriers in Virginia. See In re WorldCom, Inc. (Verizon Virginia), 18 FCC Rcd. 17722 (WCB 2003).

The arbitrator explained that her decision to reject PRTC's proposed beta figure was based in part on the fact that the peer group on which PRTC based its figure included national carriers that were providing video service, whereas PRTC was not. Because the national carriers were not the appropriate peer group, the arbitrator chose the overall S&P 500 beta of 1.0. On review, the Board agreed with PRTC that the video deployment point was unsupported in the record. Nonetheless, the Board affirmed the arbitrator's determination, because she did not rely solely on the video service point. Rather, the arbitrator had also noted that the overall beta of 1.0 for S&P 500 companies provides a "useful benchmark" of "the risk faced on average by competitive companies." This was also the rationale the FCC used in Verizon Virginia. See 18 F.C.C. Rcd. at 17762.

We cannot say that choosing a larger sample size of companies in many industries over a smaller sample size of companies in the same industry amounts to "a conclusion so implausible that it cannot be attributed to a difference of opinion or the application of agency expertise." See Associated Fisheries, 127 F.3d at 109. Thus, we agree with the district court's conclusion that the Board's decision to affirm the arbitrator's beta value of 1.0 as consistent with law and policy was neither arbitrary nor capricious.

### **3. Depreciation**

Depreciation is the mechanism by which the investment in an asset is recovered over the life of that asset. The depreciation calculation involves two factors: (1) the useful life of the asset, and (2) the rate at which the asset is depreciated over the useful life. The dispute here concerns the figures used for the range of asset lives. The FCC has identified a range of forward-looking asset lives and has deemed them "safe-harbor" lives. See Verizon Virginia, 18 F.C.C. Rcd. at 17771 n.325. The arbitrator adopted asset lives that were towards the lower end of this "safe-harbor" range.

PRTC argues that the Board's determination should be vacated as erroneous as a matter of law for two reasons. First, PRTC maintains that the Board mistakenly assumed that the FCC's Verizon Virginia decision compelled the adoption of the lower end

of the safe harbor ranges for all cases, whereas it actually applied only to that particular case and did not establish a general rule that the lower end of the safe harbor ranges is appropriate in all circumstances. Second, PRTC argues that the Arbitrator erred as a matter of law in concluding that PRTC's proposed asset lives were inconsistent with FCC requirements merely because they do not fall within the safe harbor ranges established in Verizon Virginia.

The arbitrator did not accept the depreciation rates proposed either by PRTC or by WorldNet. Rather, the arbitrator found as follows: "The FCC's more recent activity in Verizon Virginia and the generally wholesale acceptance of the Verizon Virginia order -- by both parties in certain situations -- motivates me to adopt the Verizon Virginia economic lives and depreciation rates for this arbitration. These lives have been determined to be forward-looking and are at the lower end of the safe harbor range -- in some instances these lives are shorter than those proposed by PRTC." The Board affirmed the arbitrator's decision: "It is clear her review of the record was comprehensive: her judgment to use the Verizon Virginia economic lives and depreciation rates was based on the entirety of the record. We agree with the Arbitrator who found unpersuasive PRTC's claim . . . ."

Contrary to PRTC's argument, nothing in the arbitrator's decision or the Board's affirmance of that decision suggests that the determination was compelled by Verizon Virginia. Nor does PRTC argue that the decision to use the Verizon Virginia economic lives and depreciation rates was precluded by law. Thus, there was no error of law. The arbitrator made a reasoned finding of fact and policy determination on this issue, so this Court reviews the Board's affirmance of the arbitrator under the arbitrary and capricious standard. See Centennial, 634 F.3d at 26. The Board found that the arbitrator's determination was based on a "comprehensive" review of the entirety of the record, and the Board agreed with the arbitrator that PRTC's claim was unpersuasive. Importantly, the arbitrator's finding that both parties had relied on the Verizon Virginia order in certain situations constitutes a rational basis for adopting asset lives approved by the FCC from that case. Thus, the Board's determination that the arbitrator's decision was consistent with law and policy was neither arbitrary nor capricious.

#### **4. Direct Fed Buildings**

Direct fed buildings are buildings where PRTC's proprietary telephone network cables need to be installed (instead of using another company's equipment that is already installed at the site). PRTC's figures assumed that it would place its own equipment in 100 percent of the buildings, as it had done in the

past. However, WorldNet showed that 15 percent of buildings in San Juan did not have PRTC-owned equipment, and further argued that a forward-looking model should not assume that PRTC's past practice was the least-cost, most-efficient method. The arbitrator here adopted WorldNet's proposed 15 percent reduction to the figure proposed by PRTC.

PRTC argues that the arbitrator's decision to reduce PRTC's proposed cost input for PRTC direct fed buildings by 15 percent was arbitrary and capricious because there was no support for the arbitrator's findings (1) that PRTC's proposal was inconsistent with TELRIC or (2) that a 15 percent reduction in PRTC's proposal was consistent with TELRIC. PRTC notes that neither the arbitrator nor the Board pointed to a single citation in the record or to any legal authority to support the finding that the 15 percent reduction was consistent with forward-looking cost principles, and argues that this failure is sufficient to render the Board's determination arbitrary and capricious.

PRTC's proposed cost model assumed it would place its own equipment in 100 percent of the buildings. The arbitrator reduced PRTC's proposal by 15 percent, reasoning that such a reduction was a "reasonable estimate" of the actual direct fed buildings in a "least cost, most efficient network." The Board affirmed this decision, reasoning that it was consistent with forward-looking cost principles.

As the arbitrator noted, "PRTC suggests that it always terminates on its own equipment without claiming this is a least cost, most efficient design practice." Nor does PRTC advance such an argument on appeal. Rather, PRTC merely complains that the Board gave an insufficient explanation of its decision. However, the burden is on Appellant, not the Board. "An agency's action is entitled to a presumption of validity, and the burden is upon the petitioner to establish the action is arbitrary or capricious." Sorenson Commc'ns, Inc. v. FCC, 567 F.3d 1215, 1221 (10th Cir. 2009). And PRTC has failed to show that "the agency relied on improper factors, failed to consider pertinent aspects of the problem, offered a rationale contradicting the evidence before it, or reached a conclusion so implausible that it cannot be attributed to a difference of opinion or the application of agency expertise." Associated Fisheries, 127 F.3d at 109. In affirming the arbitrator's decision as "reasonable and consistent with both law and policy," the Board noted that the arbitrator had concluded that "there was insufficient support showing why [PRTC's] existing policy is consistent with forward-looking cost principles." Therefore, PRTC has not met its burden of showing that the Board lacked a rational basis for its decision.

##### **5. Fiber Structure Costs: Excavation vs. Trenching**

The input for Fiber Structure Costs relates to the costs necessary for the placement of fiber optic cables. There are

generally two standard methods for laying cables: excavation and trenching. Excavation is more costly than trenching; accordingly, PRTC prefers excavation and WorldNet prefers trenching (though the Board noted that there are also valid engineering and economic reasons why PRTC would prefer excavation unrelated to the effect on the rates PRTC could charge to WorldNet). The Board decided the Fiber Structure Cost figure in the first instance, and thus we examine whether the Board's determination was arbitrary and capricious.

PRTC's proposal assumed that PRTC would rely on the more costly excavation 100 percent of the time. WorldNet's proposal assumed that PRTC would never rely on excavation, instead assuming that PRTC would use trenching 100 percent of the time. The Board opted to split the difference by assuming that 50 percent of the time excavation would be used, following PRTC's accounting measures, and 50 percent of the time trenching would be used, following WorldNet's accounting measures.

PRTC argues that such a "Solomonic judgment" is arbitrary and capricious, particularly where there is no support in the record for the proposition that PRTC uses trenching 50 percent of the time. PRTC further argues that the Board failed to explain why "it is likely that some mix of trenching and excavation would be used," and that under the arbitrary and capricious standard, agencies must adequately explain their reasoning.

We agree with the district court that the Board's decision "was reasonable and supported by record evidence, and thus was neither arbitrary nor capricious." WorldNet III, 707 F. Supp. 2d at 211. The Board examined the evidence presented and found that it does "not believe that any proposal that relies on 100% of either excavation or trenching is reasonable." The Board observed that the evidence at the hearing "convinced us that each method has upsides and downsides." Furthermore, the Board noted "that trenching and excavation are used by other providers as they design and execute their networks, including providers in Puerto Rico such as Centennial and cable TV companies." Thus, the Board concluded "that in a forward-looking, least cost/most efficient network it is likely that the mix of trenching and excavation would be used." There was no support for either party's absolute position, but there was also no evidence demonstrating the proper exact ratio in a forward-looking network. Under these circumstances, it was perfectly reasonable for the Board to assume a 50/50 split.

## **6. Total Cable / Cable Size**

The "Total Cable" or "Cable Size" figure determines the total quantity of cables in a forward-looking, efficient, least-cost network. The cost of the cable is dependent on the size of the cable used; larger-sized cables, which carry more data, are less expensive to deploy than smaller cables. The higher the cost of cable, the higher the cost that PRTC can charge WorldNet under

the ICA. Both PRTC and WorldNet asked the Board to consider the arbitrator's initial decision on this figure. The Board requested additional submissions from both sides and then issued its own figure, which PRTC challenges. Because the Board issued its own figure, we examine whether the Board's determination was arbitrary and capricious.

PRTC argues that under FCC rules, forward-looking cost models "must estimate the cost of providing service for all businesses and households within a geographic region." See In re Federal-State Joint Bd. on Universal Serv. (Universal Service First Report and Order), 12 F.C.C. Rcd. 8776, 8912-16 (1997). PRTC contends that the Board's methodology failed to meet this requirement because it resulted in a total cable figure that is not sufficient to serve all of Puerto Rico. However, WorldNet and the Board counter that PRTC's position regarding the amount of cable required to cover Puerto Rico was based on flawed assumptions. WorldNet notes that many parts of Puerto Rico are mountainous or sparsely populated and thus require little or no cable. PRTC's proposal to the Board did not account for this, and was thus unrealistically high. PRTC had also contended that the amount of cable it currently uses should have been a "sanity check" for determining if the Board's calculation was correct, and it noted that the total length of cable under the Board's calculation was only roughly one third of the present amount. However, the Board

argues that because the Act requires a forward-looking estimate based on the most efficient network, it would not have been appropriate to rely on the current cable length figure as a benchmark. Thus, there was nothing arbitrary or capricious about the Board's rejection of PRTC's proposal.<sup>23</sup>

Furthermore, there was nothing arbitrary or capricious in the approach the Board adopted. PRTC's proposal included a "simplifying assumption" that the width of the cable would decrease at a steady rate along the path between PRTC's central offices and the customers. The Board held that this assumption was not necessary and instructed PRTC to "provide a cost study module for cable sizes and investment that does not include the unnecessary simplifying assumptions in this matter," to which WorldNet would be allowed to respond. However, PRTC did not provide any new data to the Board. The Board ultimately settled on "a modified WorldNet approach" that eliminated both sides' simplifying assumptions. Given that the Board requested additional studies and briefing, and

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<sup>23</sup> WorldNet contends that TELRIC methodology does not require an estimate of the cost of providing coverage to all of Puerto Rico. We disagree. In Verizon Virginia, the FCC noted that it had previously "delineated ten criteria that should be used in making forward-looking economic cost determinations" in a TELRIC proceeding; these criteria were criteria that the FCC had identified in its Universal Service Order decision. See Verizon Virginia, 18 F.C.C. Rcd. 17742 (citing Universal Service First Report and Order, 12 F.C.C. Rcd. at 8912-16, ¶ 250). The ten criteria identified in Universal Service First Report and Order include the requirement that the model "must estimate the cost of providing service for all businesses and households within a geographic region." 12 F.C.C. Rcd. at 8915, ¶ 250(6).

carefully considered both parties' models before adopting a hybrid approach, the Board's reasoned determination did not lack a rational basis and was thus not arbitrary and capricious.

**E. The Arbitrator's Determinations that the Board Reversed**

PRTC argues that the district court erred in reversing the Board's determinations as to the input for Circuit Demand and the inputs for NIDs and Block Terminals. PRTC maintains that these determinations were arbitrary and capricious rulings by the arbitrator, which the Board had a duty to correct. PRTC maintains that the district court's decision on this issue would "give rise to the irrational situation in which State Commissions are helpless to correct arbitrator determinations that are arbitrary and capricious either because the arbitrator failed to consider evidence that is relevant under the TELRIC methodology or because they are not supported by the record."

As the district court opinion is not entitled to deference, but is only accepted to the extent it is persuasive, this Court is concerned only with the appropriate standard of review for the Board's determination. See Centennial, 634 F.3d at 26; WorldNet I 497 F.3d at 5. The Board's determinations to overrule the arbitrator can only be upheld: (1) if the arbitrator's determinations were inconsistent with Sections 251 and 252(d) of the federal Act; or (2) if the Board reasonably determined that the ICA provisions at issue conflicted with Puerto Rico statutes, the

Board's rules, or the Board's policy determinations. WorldNet I, 497 F.3d at 7. If the Board based its determination on the former prong (for inconsistency with the Federal Act), this Court reviews de novo that determination by the Board. See Global NAPs III, 444 F.3d at 70 (holding that the Board's determinations resting principally on an interpretation of the federal Act are subject to de novo review by this Court).

### **1. Circuit Demand**

This issue concerns the pricing for unbundled "transport" network elements, which are connections between PRTC switching centers that WorldNet leases for its use. To determine the rate for these elements, the Board considers (1) the cost of equipment needed to establish transport circuits and (2) total demand for such circuits. PRTC proposed a cost model based on 2005 and 2007 prices for the equipment, divided by the 2001 circuit demand in order to get the forward-looking rate. WorldNet disputed the use of the 2001 circuit demand level, and offered expert testimony to establish a more current figure. The arbitrator determined that the future demand projection provided by WorldNet's expert -- unrefuted by PRTC -- was "reasonable" and applied that figure to the model.

The Board reversed the arbitrator, finding that the arbitrator had failed to "account for the match between investment and demand" and that therefore the arbitrator's order was

"inconsistent with Section 252(d) in not considering all of the data and the effect of the decision in determining forward-looking rates." Accordingly, the Board imposed PRTC's model with the 2001 circuit demand figure.

The district court reversed the Board's decision, reinstating the arbitrator's determination. See WorldNet III, 707 F. Supp. 2d at 196. The court noted that the Board did not discuss how the arbitrator's decision conflicted with TELRIC or the Act, and "there is simply no indication that the arbitrator did not consider 'all of the costs.'" Id. The court then held that the Board's use of the words "'inconsistent with Section 252(d)'" is not sufficient to give it carte blanche to overturn the arbitrator." Id. Rather, here the Board merely had a difference of opinion with the arbitrator as to the weight given to evidence in the record. To the district court, "it appeared that the arbitrator did consider all of the data and the TELRIC requirements." Id. In such a situation, the district court found that the Board cannot overturn the arbitrator merely because it would have reached a different conclusion "if framing the agreement itself." Id. (quoting WorldNet I, 497 F.3d at 8).

With respect to Circuit Demand, the entirety of the Board's resolution and explanation is the following:

We agree with PRTC that in making her determination, the Arbitrator did not account for the match between investment and demand. In this matter, the Order was inconsistent

with Section 252(d) in not considering all of the data and the effect of the decision in determining forward-looking rates.

Consequently, upon reconsideration, we reject the Arbitrator's requirement to increase demand by 35.15 percent over a five year period (approximately 7 percent per year). We conclude that PRTC has provided a reasonable projection of demand.

For Circuit Demand, then, the Board did not appeal to Puerto Rico law, Board rules, or Board policy. In this case, the Board explicitly reasoned that the arbitrator's Circuit Demand determination was inconsistent with Section 252(d) of the federal Act. Therefore, the Board's decision rests principally on its interpretation of the federal Act, and is thus subject to de novo review. See Global NAPs III, 444 F.3d at 70.

On a de novo review, the only part of Section 252(d) that appears to be relevant is Section 252(d)(1)(A)(I), which mandates that the Board's rate determinations must be based on the cost of providing the network element. This requirement does not establish much. Neither PRTC nor the Board has shown how the arbitrator's determination was inconsistent with Section 252(d). As the district court rightly observed, merely invoking the words "inconsistent with Section 252(d)" does not give the Board the authority to overrule an arbitrated provision. WorldNet III, 707 F. Supp. 2d at 196. Contrary to the Board's assertion, there is no indication that the arbitrator did not consider all of the costs. Rather, it seems that the Board merely disagreed with the

arbitrator's determination based on a difference of opinion as to the weight of the evidence. Under the Federal Act and First Circuit precedent in WorldNet I, such a difference of opinion is not a valid basis for the Board to overrule an arbitrated provision in an ICA. See 497 F.3d at 8; 47 U.S.C. § 252(e)(2)(B). Therefore, the district court properly reversed the Board's determination and reinstated the determination of the arbitrator.

## **2. NIDs and Block Terminals**

A network interface device (NID) is a small boxed device connecting the telephone network to the inside wires of a house or other premises. Similar to an NID, a block terminal connects the telephone network plant to the inside wires of a large building. Ground rods are metal shafts driven into the ground that carry current away from the telephone network in the case of an electrical surge. Ground rods are typically connected to NIDs and block terminals, and are thus factored into the costs of those two network elements. The underlying dispute between PRTC and WorldNet on this issue concerned whether the model should assume either (a) that PRTC will install its own new ground rods with all its NIDs and block terminals, or (b) that PRTC should use existing ground rods when they have already been installed by power companies or cable providers.

PRTC presented evidence to the arbitrator that its practice was to install its own ground rods with all NIDs and block

terminals, instead of relying on non-company equipment that may be moved. WorldNet presented evidence that ground rods needed to be installed just 66% of the time for NIDs and 10% of the time for block terminals. The arbitrator adopted WorldNet's proposal, finding that in a least cost/most efficient network, PRTC should share existing ground rods and that its policy of installing new ground rods in all cases was unreasonable.

The Board overturned the arbitrator's decision, holding that "the record does not provide sufficient support for WorldNet's proposals" and therefore the arbitrator erred in adopting them "without sufficient evidence." The Board found that "without contradictory persuasive evidence, PRTC's safety concerns must prevail."

The district court reversed the Board's decision, reinstating the arbitrator's determination. WorldNet III, 707 F. Supp. 2d at 195. The district court reasoned that the Board's decision was merely "a reconsideration of the evidence." Id. at 194. The court noted that the Board did not suggest that the arbitrated solution conflicted with the statute, Puerto Rico laws, Board rules, or Board policy, "but rather stated that the arbitrator incorrectly weighed the evidence." Id. at 195. Thus, the Board exceeded its authority under WorldNet I. WorldNet III, 707 F. Supp. 2d at 195 (citing WorldNet I, 497 F.3d at 7). The court noted that "when a state board delegates its duties to an

arbitrator, it cannot overturn the arbitrator's solution simply because 'if framing the agreement itself' it would follow different policies based on 'ad hoc preferences.'" Id. (quoting WorldNet I, 497 F.3d at 8).

With respect to NIDs and Block Terminals, the entirety of the Board's resolution and explanation is as follows:

The record does not provide sufficient support for WorldNet's proposals for use of ground rods and we conclude that the Arbitrator erred in adopting those proposals without sufficient evidence. We find that, without contradictory persuasive evidence, PRTC's safety concerns must prevail. The Arbitrator is overruled and PRTC's proposal is accepted.

This explanation does not mention either (1) any inconsistency with the federal Act, or (2) any conflict with Puerto Rico statutes, the Board's rules, or the Board's general policy determinations. There is no apparent conflict with Sections 251 or 252(d) of the Act. Nor does either PRTC or the Board articulate how the arbitrator's decision conflicted with Puerto Rico statutes, the Board's rules, or the Board's general policy. Therefore, as persuasively found by the district court, the Board overruled the arbitrator simply on the basis of a reconsideration of the evidence and because it would have followed a different policy based on "ad hoc preferences" -- which is an invalid basis for the Board to overrule the arbitrator, as WorldNet I established. See 497 F.3d at 8; 47 U.S.C. § 252(e) (2)(B). Because the Board's determination with respect to NIDs and

Block Terminals exceeded its authority in reviewing an arbitrated ICA, the district court's reversal of the Board was proper.

**IV. Conclusion**

For the foregoing reasons, we find no reversible error. Accordingly, the judgment of the district court is affirmed.

**Affirmed.**

## **Appendix**

To aid the reader's understanding of the technical issues in this case, we provide the following table of key terms:

<b>Term</b>	<b>Description</b>
"ICA" or "the Agreement"	An "interconnection agreement" or "ICA" is a contract between phone companies to share equipment and connect each other's customers. The contract can be either by mutual agreement or imposed by a state regulatory board.
"ILEC" or "incumbent LEC"	An "incumbent local exchange carrier" is a phone company formerly with monopolistic status or dominant market share and facilities in a given market. Here, PRTC is the incumbent LEC.
"CLEC" or "competitive LEC"	A "competitive local exchange carrier" is an insurgent phone company that wishes to compete with the incumbent LEC in a given market. Here, the CLEC at issue is WorldNet.
"the Act" or "the federal Act"	The Telecommunications Act of 1996, 47 U.S.C. § 251 <u>et seq.</u> , is a federal act intended to open U.S. telecommunications markets to competition. Among other things, the Act requires ILECs to allow CLECs to use the incumbent carriers' networks and equipment in order to connect customers and to compete.
TELRIC	TELRIC ("total element long-run incremental cost") is a forward-looking methodology that the FCC requires carriers and state boards to use in setting rates for ICAs between ILECs and CLECs.
Buried Conduit or Buried Drops	An input to the cost model based on the cost of placing the buried wire that connects customers to the PRTC network.
Cable Size or Total Cable	The "Cable Size" or "Total Cable" figure determines the total quantity of cables in the hypothetical, forward-looking, most efficient, least cost network.

Circuit Demand (or Current Demand)	This input is related to pricing for unbundled "transport" network elements, which are connections between PRTC switching centers that WorldNet leases for its own use. To determine the rate for these elements, the Board considers (1) the cost of equipment needed to establish transport circuits and (2) total demand for such circuits.
Weighted Average Cost of Capital	The Weighted Average Cost of Capital ("WACC") determines the level of return to investment contained within prices that an ILEC is expected to earn. Often referred to as the company's "rate of return." A WACC calculation includes a determination of the "beta" factor, which estimates the risk of investing in a particular company by measuring the volatility of its stock as compared to the market as a whole.
Depreciation	Depreciation is the mechanism by which the investment in an asset is recovered over the life of that asset. The depreciation calculation involves two factors: (1) the useful life of the asset, and (2) the rate at which the asset is depreciated over the useful life.
Direct Fed Buildings	Direct fed buildings are buildings where PRTC's proprietary telephone network cables will be installed (instead of using another company's equipment that is already present).
Fiber Structure	Fiber structure costs are those costs necessary for the placement of fiber optic cables, including trenching and excavation to lay cables. The cost of paving is another fiber structure cost.
Local Loop Rate	Also called "rates for local loops." This term refers to the rates that PRTC can charge WorldNet for the wires and cable used to connect the network to a customer's home or business.
Mixed Bundles	A "mixed bundle" is a packaged resale product containing both telecommunications and non-telecommunications services. For example, a carrier might offer phone service for \$30 and cable television for \$30, but could combine both in a discounted "mixed bundle" of phone and cable services for \$50.

NIDs, Block Terminals (or Terminal Blocks), and	A network interface device (NID) is a small boxed device connecting the telephone network to the inside wires of a house or other premises.  Similar to an NID, a block terminal connects the telephone network plant to the inside wires of a large building.
Ground Rods	Ground rods are metal shafts driven into the ground that carry current away from the telephone network in the case of an electrical surge.
Structure Sharing	Structure sharing refers to how much of the cost of installing poles, digging trenches, and placing conduit is to be shared on a forward-looking basis by the incumbent carrier with other entities (such as power companies, cable operators, and CLECs). The more sharing that is assumed, the lower the cost to the ILEC, and thus the lower the cost that is reflected in ICAs with CLECs.
Transit Traffic Rates	Transit traffic refers to an arrangement in which CLEC "A" and CLEC "B" do not have sufficient network traffic between them to justify dedicated facilities connecting their networks, so instead they negotiate with the ILEC to "transit" traffic between their two networks -- that is, to connect each other's customers.
UNEs	UNEs are "unbundled network elements." Under the federal Act, incumbent carriers are required to provide access to UNEs to competitive carriers at nondiscriminatory rates.