

## BOARD OF ADVISORS

**Nigel Blackaby**

Global Head,  
International Arbitration Group,  
Freshfields Bruckhaus Deringer

**Mary Rose Brusewitz**

Partner,  
Strasburger & Price

**Jeffrey Davidow**

Senior Counselor,  
The Cohen Group

**Jonathan C. Hamilton**

Partner,  
White & Case

**Ana Heeren**

Managing Director,  
FTI Consulting

**Raul Herrera**

Partner,  
Corporate & Securities Practice,  
Arnold & Porter

**James R. Jones**

Chairman,  
Monarch Global Strategies

**Jorge Kamine**

Counsel,  
Skadden Arps

**Craig A. Kelly**

Director,  
Americas Int'l Gov't Relations,  
Exxon Mobil

**Jorge León**

Energy Economist,  
BP

**Jeremy Martin**

Vice President, Energy & Sustainability,  
Institute of the Americas

**Larry Pascal**

Chairman,  
Americas Practice Group,  
Haynes & Boone

**Charles Shapiro**

President,  
World Affairs Council of Atlanta

**R. Kirk Sherr**

President,  
Clearview Strategy Group

**Mark Thurber**

Partner,  
Hunton Andrews Kurth

**Alexandra Valderrama**

Manager,  
International Government Affairs,  
Chevron

**Jose L. Valera**

Partner,  
Mayer Brown LLP

**Lisa Viscidi**

Program Director,  
Inter-American Dialogue

## FEATURED Q&amp;A

# How Can Colombia Improve Electricity Supply on its Coast?



Colombian Mines and Energy Minister María Fernanda Suárez announced on April 2 that the government was looking for a new operator to supply electricity in the country's Caribbean coast. // File Photo: Colombian Government.

**Q** Colombia has launched a process to find a replacement for Electricaribe to supply electricity to more than 10 million customers on its Caribbean coast. The government in 2017 had ordered the liquidation of Electricaribe, a subsidiary of Spain's Gas Natural, due to perceived deficiencies in its electricity services. Why did Electricaribe's services fall short of expectations, and what is the Colombian government looking for in its replacement? How big of a challenge is supplying electricity in Colombia's Caribbean coast, and what are the most significant issues that the new power provider could face?

**A** Leopoldo Olavarria, partner and head of energy in Latin America at Norton Rose Fulbright: "When Electricaribe was intervened, its earnings were insufficient to meet its investment requirements and operational expenses. The main causes were theft of electricity and lack of electricity bill payments by public entities. That operational deficit resulted in recurring service interruptions, affecting its customers. The Duque administration is seeking a definitive solution to a historically deficient service in the region. By carving out Electricaribe's pre-existing pensions liability (about 1.2 billion pesos), a big obstacle to financially sustainable operations is removed. A new qualified operator will be sought for each of the two new regions, who must meet the government's minimum investment requirements. This should lead to improvements in electricity service. The seven departments that Electricaribe must serve represent up to 25 percent of Colombia's total demand. There are a few potential investors with the re-

Continued on page 3

## TOP NEWS

## OIL &amp; GAS

## U.S. Targets Firms Shipping Oil From Venezuela to Cuba

The U.S. Treasury sanctioned four maritime shipping companies and nine of its oil tankers for delivering Venezuelan crude to Cuba, stepping up efforts to pressure what it called "the illegitimate regime" in Venezuela.

Page 2

## OIL &amp; GAS

## ExxonMobil Wins Argentina Exploration Rights

U.S.-based oil major ExxonMobil said it had won rights to search for oil in the Malvinas basin, off the coast of Argentina.

Page 2

## OIL &amp; GAS

## Haiti Facing Fuel Shortages Amid Payment Dispute

The Haitian government's failure to pay for U.S. trading company Novum's fuel shipments in the last months have left the capital city of Port-au-Prince in what Mayor Youri Chevy called "a very bad situation."

Page 2



Chevy // File Photo: @ChevyYouri via Twitter.

## OIL AND GAS NEWS

## U.S. Sanctions Firms That Send Oil From Venezuela to Cuba

The U.S. Treasury on April 12 announced financial sanctions on four maritime shipping companies and nine of their oil tankers for delivering Venezuelan crude to Cuba, stepping up efforts to pressure what it called “the illegitimate regime of former Venezuelan President Nicolás Maduro,” Agence France-Press reported. “We continue to target companies that transport Venezuelan oil to Cuba, as they are profiting while the Maduro regime pillages natural resources,” U.S. Treasury Secretary Steven Mnuchin said in the statement, adding

**The latest U.S. sanctions target three Liberian shipping corporations, and another one based in Italy.**

that “Venezuela’s oil belongs to the Venezuelan people and should not be used as a bargaining tool to prop up dictators and prolong oppression.” The United States and dozens of other countries reject Maduro’s presidency, instead recognizing opposition leader and National Assembly head Juan Guaidó as Venezuela’s legitimate interim president. The latest U.S. sanctions, which freeze any U.S. assets companies hold and block them from much of the global financial system, target three Liberian shipping corporations, and another based in Italy, AFP reported. The Trump administration on April 5 had slapped new sanctions on Venezuela’s government, targeting shipments to Cuba, which provides the South American government with intelligence and counterintelligence, The New York Times reported. In response, Venezuelan Foreign Minister Jorge Arreaza last week said Venezuela would continue honoring its oil commitments to Cuba despite the sanctions, Reuters reported. Venezuela is estimated to be shipping Cuba between 20,000 and 50,000

barrels of oil per day, according to White House officials and oil industry experts, the wire service reported. [Editor’s note: See related [Q&A](#) in the Feb. 1 issue of the Energy Advisor.]

## Dispute With U.S. Firm Leaves Haiti With Fuel Shortages

A payments dispute between Haiti and U.S. trading firm Novum Energy is causing long blackouts and fuel shortages in the Caribbean country, adding to social unrest and demands for President Jovenel Moïse’s resignation, Reuters reported Sunday. Novum suspended fuel shipments to Haiti in February, leaving the capital city of Port-au-Prince with no electricity for days, as well as many gas stations with no fuel to sell. Novum has delivered fuel to Haiti for more than four years. It recently increased its shipments there as the Petrocaribe program, which offered cheap financing to a number of Caribbean nations to buy their fuel from Venezuela, tumbled amid the South American



Moïse // File Photo: Haitian Government.

country’s economic and political crises last year. The fallout forced Haiti to return to international markets, and it’s struggling to meet payment demands without the Petrocaribe discounts, Oil Price reported. Novum stepped in, supplying 80 percent of Haiti’s gasoline and diesel needs last year, according to the trading company. However, on Feb. 27, Novum refused to deliver a shipment of 150,000 barrels of gasoline, equivalent to approximately half of Haiti’s monthly consumption of gasoline, until a payment dispute with the government was resolved. The vessel stayed there until April 4, when Novum said the situation was “unten-

## NEWS BRIEFS

## Mexican Gov’t Does Not Expect Downgrades for Pemex: Finance Minister

Mexican Finance Minister Carlos Urzúa said Saturday that he does not expect further credit ratings downgrades for state oil company Pemex, Reuters reported. Urzúa said that if he was a foreign investor, “I’d be buying Pemex debt,” because the company won’t go out to the debt market this year, which he said would make existing bonds appreciate in value. Fitch earlier this year lowered Pemex’s rating two notches to BBB-, the lowest investment grade rating. [Editor’s note: See related [Q&A](#) in the April 12 issue of the Energy Advisor.]

## Indigenous Group Sues Ecuador to Stop Land Auctions to Oil Companies

The Waorani hunter-gatherer community in the Amazon region of Ecuador on April 11 went to court in an effort to stop Ecuador’s government from auctioning their land to oil companies, in a lawsuit that may set a precedent for other tribes opposed to drilling, Reuters reported. Nemonte Nenquimo, a leader of the Waorani, said the fight is not just about oil but also about different ways of living, “one that protects life, and one that destroys life,” the wire service reported.

## ExxonMobil Wins Rights to Search for Oil in Argentina

ExxonMobil announced Wednesday it had won rights to search for oil in three blocks in Argentina’s latest offshore bid round. The award adds 2.6 million net acres to the company’s upstream holdings in Argentina and builds on its existing presence in Neuquén Province, which includes the onshore Vaca Muerta unconventional oil play. The blocks are located in the Malvinas basin, approximately 200 miles offshore Tierra del Fuego.

able” and sent the ship to Jamaica, prompting electricity and gasoline shortages to worsen in the capital. “It’s a very bad situation,” Port-au-Prince Mayor Youri Chevry said, Reuters reported. “It has a lot of repercussions.” Chris Scott, Novum’s chief financial officer, said Haiti “need[s] to pay in order for us to be able to discharge [the shipments].” The fuel shortages have reignited protesters who over the last months have demanded Moise’s resignation amid government inaction in the face of corruption allegations in connection with Petrocaribe. [Editor’s note: See related [Q&A](#) in the Feb. 22 issue of the Energy Advisor.]

## Brazilian Gov’t Seeks to Avert New Strike Over Diesel Prices

Brazilian President Jair Bolsonaro’s government on Tuesday announced a financial package aimed at appeasing truck drivers in an effort to prevent another strike like the one that paralyzed much of the country’s commerce last year, the Associated Press reported. Last year’s strike by self-employed truck drivers who wanted lower prices for diesel, among other demands, caused shortages of food, medicines and other goods across the country last May and June. Under the aid package, the



Bolsonaro // File Photo: Brazilian Government.

Brazilian Development Bank plans to provide truckers with \$128 million in credit, and the country’s Ministry of Infrastructure will spend \$514 million on improving roads in the country, according to Bolsonaro’s chief of staff, Oxyx Lorenzoni. Last week, Bolsonaro called the CEO of state oil company Petrobras and canceled a planned 5.7 percent increase in diesel

### FEATURED Q&A / Continued from page 1

quired qualifications for such a large market. To increase the number of potential bidders, the government created two regions: Caribe Sol (Atlántico, Magdalena and La Guajira Departments, which generate about 10.8 percent of Colombia’s demand) and Caribe Mar (Bolívar, Sucre, Cordoba and Cesar Departments, generating about 10.9 percent of total demand). This market separation should facilitate new investor entry. The biggest challenge that a new provider will face is the theft of electricity. But the scourge of illegal connections should be reduced by the requirement to install centralized and individual metering systems, some of which will be smart, to allow the operator-distributor to control users’ consumption and identify and combat theft. In addition, we would expect that the national government will find a way to ensure that public entities that consume electricity in the Caribbean coast will meet their payment obligations to the new operator(s).”

**A** **Astrid Álvarez, president of Grupo Energía Bogotá (GEB):** “For the electricity sector, the Caribbean coast is one of Colombia’s most important regions, with more than 2.6 million clients, more than 10

million users and a market share close to 22 percent. At Grupo Energía Bogotá, we see with great interest the national government’s efforts in the search for a structural and definitive solution to improve the quality and reliability in the provision of electric power service in the Colombian Caribbean coast, by managing to link suitable operations with the capacity to execute the necessary investments to replace and build those assets that allow the service to be provided efficiently, while also increasing coverage. However, we think it’s important that the solution to the electricity supply problems be based on technical and financial analyses that determine the adequate way of segmenting the market and defining the limits of market share for those interested in the process. Recently, the government announced the roadmap for the process of linking investors to Electricaribe, saying it would divide the operation of the company into two geographical segments to facilitate its operation. On our part, GEB has launched important projects to strengthen service provision in the Caribbean coast. In 2018, we inaugurated Río Córdoba and Bolívar-Cartagena, and we’ll continue advancing the development of projects in this region. This is the case of Colectora, which for the first time will allow

Continued on page 6

prices. The move made investors concerned that Bolsonaro’s decision could lead to more government intervention in the affairs of the state oil company. Petrobras’ shares plunged 13 percent on the news. On Tuesday, Bolsonaro spokesman Otavio Rego Barros and Economy Minister Paulo Guedes sought to reassure investors, telling reporters that it is up to Petrobras to decide when to adjust fuel prices and by how much, Reuters reported. “I cannot and I will not interfere in Petrobras,” Bolsonaro said in a written statement read by Barros. On Tuesday, Petrobras said it would not adjust gasoline or diesel prices on Wednesday. Guedes said Bolsonaro was responding to political concerns when he called Petrobras CEO Roberto Castello Branco to order the cancellation of the diesel

price hike. However, the Bolsonaro government says it is now committed to allowing Petrobras full autonomy in adjusting prices, Reuters reported. The financial package for truckers was seen as an effort by the government to appease the sector without intervening in fuel prices, the Associated Press reported. Bolsonaro’s move to cancel the planned diesel price received support from former President Dilma Rousseff, who said Sunday in a tweet that “the management of the largest Brazilian public company cannot be subjected to the short-term logic of financial speculation.” Bolsonaro campaigned on vows of allowing the market to operate freely and blasting the leftist Workers’ Party, of which Rousseff is a member, for what he called their “incompetence.”

## POLITICAL NEWS

## Former Peruvian President Alan García Commits Suicide

Former Peruvian President Alan García, who served two nonconsecutive terms as the country's leader, committed suicide Wednesday, shooting himself in the head as police officers attempted to arrest him in connection with the sprawling Odebrecht case. Current President Martín Vizcarra confirmed García's death in a tweet. "Saddened by the death of former



García // File Photo: TV Perú.

President Alan García. I send my condolences to his family and loved ones," said Vizcarra. When officers arrived with an arrest warrant early Wednesday morning, the former president locked himself in his bedroom, shot himself and then was rushed to a hospital, his personal secretary told reporters, The New York Times reported. On Tuesday, García, who was 69, asserted his innocence via Twitter. "I never sold myself, and it's proven," he said in a tweet. In a 2016 agreement with the U.S. Justice Department, Brazilian construction conglomerate Odebrecht acknowledged that it paid bribes throughout Latin America in order to secure lucrative contracts. Peru has been among the most aggressive countries in investigating the graft scandal, with prosecutors there pursuing top politicians and business leaders, The Wall Street Journal reported. García was among four former Peruvian presidents who have faced corruption allegations in connection with the scandal. Odebrecht admitted to paying approximately \$29 million in bribes in the Andean nation. After García died, Peru's Congress lowered its flag to half

## ADVISOR Q&A

### Will Argentina's Economy Soon Improve?

**Q** Argentina's state-run statistics institute in recent weeks has published downbeat economic indicators, including a report that the country's gross domestic product shrank 6.2 percent in the fourth quarter—the worst quarterly performance since 2009. Also, Argentina's poverty rate in the second half of last year rose to 32 percent, six percentage points higher than in 2017. Will economic conditions in Argentina begin improving this year? Is the \$57 billion loan program that Argentina and the International Monetary Fund agreed upon last year helping the country's economy? What do President Mauricio Macri's government and the central bank need to do in order to return the country to economic growth?

**A** Kezia McKeague, director at McLarty Associates: "Recent economic indicators have indeed been discouraging—and the levels of inflation are particularly frustrating for President Macri's economic team in the wake of the contractionary monetary policy instituted last October. Nevertheless, a gradual recovery is expected in the coming quarters. The drivers will be agricultural exports, aided by a more competitive exchange rate and a record harvest, and some recovery in consumption. Investment, however, will remain stagnant given high real interest rates and political uncertainty in the run-up to the October presidential

election. The IMF loan helped to stabilize the economy following two significant currency crises last year, and the government's subsequent progress in correcting the high fiscal and external deficits—at the heart of the 2018 crisis in confidence—will reduce Argentina's vulnerability to external shocks going forward. Inflation will remain high this year, but the central bank's commitment to zero monetary-base growth—and the elimination of transfers to the treasury to finance the fiscal deficit—will mitigate the inflationary recipes that have been hallmarks of Argentina's economy. Nevertheless, as the central bank's leadership acknowledged in Washington last week, more is needed than the appropriate monetary regime to address the country's long history of inflation. The government has made some progress on microeconomic reforms and improved regulations and investment in infrastructure, but deeper structural reforms will be needed for strong and equitable growth. Those reforms, however, will be too ambitious for a highly uncertain election year. As the Macri administration prepares for a tough re-election battle, the priority will be currency stability, even at the cost of economic activity."

---

**EDITOR'S NOTE: More commentary on this topic appears in Monday's issue of the Latin America Advisor.**

---

staff, and dozens of police officers in riot gear blocked the entrance to the hospital where he had been taken. A small group of the former president's supporters gathered outside the hospital, embracing each other. García was just 36 when he first became Peru's president in 1985. His election marked the first time that his Apra party had won the presidency after Peru's military regimes had outlawed it

for years, The Wall Street Journal reported. However, the efforts by García's government to print money and nationalize banks left the country with soaring inflation as it teetered on the edge of bankruptcy. The Shining Path guerrilla group began a series of bombings and assassinations. After his term ended, García faced corruption allegations and fled to Colombia and then France. García's presidency led to

## NEWS BRIEFS

## Guatemalan Presidential Candidate Estrada Arrested in Miami

A Guatemalan presidential candidate was arrested in Miami on Wednesday and charged with plotting to use drug cartel money to win the June 16 election and assassinate rivals, Reuters reported. According to U.S. officials, Mario Estrada, 58, a candidate of the center-right National Change Union, is accused along with another man, Juan Pablo González, of seeking some \$10 million from Mexico's Sinaloa Cartel to fund his campaign and transport cocaine into the United States.

## Mexico's López Obrador Vows to Suspend Education Reform

Mexican President Andrés Manuel López Obrador said Tuesday he will unilaterally suspend a 2013 public education overhaul until his proposed reforms are addressed in Congress, The Washington Post reported. Opposition lawmakers questioned the legality of the move, which calls on all federal agencies to ignore the constitutional changes in education made under the previous government of President Enrique Peña Nieto. López Obrador also called for the reinstatement of teachers fired for refusing to take evaluation tests and the release of teachers jailed during protests.

## Brazil's Economic Activity Falls in February

Brazil's economic activity fell 0.73 percent in February from a month earlier, the largest drop in nine months, according to central bank statistics released Monday, Reuters reported. Economic activity had contracted by 0.31 percent in January. The bank's IBC-BR economic activity index is a leading indicator of gross domestic product, which is estimated to fall by 0.1 percent in the first quarter of this year, Bradesco economists wrote in a note.

the election of Alberto Fujimori who ruled the country for the next decade. García returned to power in 2006 and oversaw solid economic growth during his second term before leaving office in 2011.

## ECONOMIC NEWS

## U.S. Imposes New Sanctions on Cuba, Nicaragua, Venezuela

The administration of U.S. President Donald Trump on Wednesday announced tough new sanctions and restrictions on Cuba, Nicaragua and Venezuela, three countries whose leaders National Security Advisor John Bolton called the "three stooges of socialism," the Associated Press reported. Bolton announced a new

**“The United States looks forward to watching each corner of this sordid triangle of terror fall...”**

— John Bolton

cap on the amount of money families in the United States can send their relatives in Cuba, limiting remittances to \$1,000 per person per quarter. Bolton also announced that the U.S. was sanctioning Venezuela's central bank, as well as adding sanctions against financial services provider Bancorp, which he claimed is a "slush fund" for Nicaraguan President Daniel Ortega. "The United States looks forward to watching each corner of this sordid triangle of terror fall: in Havana, in Caracas, and in Managua," Bolton said in a South Florida speech marking the anniversary of the failed U.S.-backed Bay of Pigs invasion of Cuba. Democratic lawmakers assailed the changes. Rep. Eliot Engel (D-N.Y.), chairman of the House Committee on Foreign Affairs, said that limiting remittances to struggling Cuban families deprives them of the resources they need to

survive. "This is quite simply inhumane. I urge President Trump to return to smart policies aimed at supporting the Cuban people rather than causing further harm to these individuals," he said.

## Argentina Launches Price Controls to Curb High Inflation

Facing persistently high inflation and falling approval ratings, the government of Argentine President Mauricio Macri reached an agreement with companies to freeze prices on 64 staple food items Wednesday, Bloomberg News reported. Officials also reached agreements with mobile phone service operators to fix prices for the next five months. Prices for gas, electricity and public transportation will also remain unchanged, according to official documents. Economy Minister Nicolas Dujovne said the short-term measures were meant to ease the financial burden on Argentines suffering from the nation's second recession in three years. Dujovne added that the move was not intended to freeze prices as an anti-inflationary tool, as past administrations have done with generally disappointing results. The govern-



Dujovne // File Photo: Argentine Government.

ment also announced that it would provide more loans to pensioners and offer discounts at supermarkets in an effort to spark an economic rebound. On Tuesday, state statistics agency INDEC said consumer prices in March rose by 4.7 percent as compared to the month before, a rate that was "significantly higher than expected," according to Goldman Sachs analyst Alberto Ramos. "Inflationary pressures remain high despite a very deep recession," Ramos told clients in a research note.

## FEATURED Q&amp;A / Continued from page 3

the transmission of electricity produced at the wind parks in La Guajira—one of the departments with the most potential in wind power—to the rest of the country. In this manner, we will support the Caribbean coast, which has a great potential for development and where we are carrying out social and environmental-protection programs through our ‘corredores verdes,’ or our transmission projects.”

**A** **Santiago Arango Aramburo, director of the Development and Innovation Center (CDi) at the National University of Colombia in Medellín:** “The motivation of deregulation of the power market was, among other important factors, the mismanagement of some state-owned companies with inefficient resource allocation and high technical and socioeconomic losses, such as the culture of nonpayment of the service. While some regions had high-quality services, with a continued security of supply, other regions kept some of the problems—particularly the Caribbean coast. The region, a very influential and important area with more than 10 million inhabitants, has been facing the challenge of reframing its whole electricity system. One of the key challenges comes from a classic feedback problem—a chicken-and-egg issue—in the approach toward the

electricity system. There is a low payment rate on the part of customers, which means the suppliers’ incomes are low, which in turn affects its finances. With less income, there are less investments in maintenance and replacements, among others. The less

“There is a low payment rate on the part of customers, which means the suppliers’ incomes are low...”

— Santiago Arango Aramburo

investment there is, the lower the quality of the services, and therefore, less willingness to pay for the electricity. The situations reinforce each other, resulting in a spiraling decay of the quality of the system. Thus, a solution should consider this feedback loop and come up with a two-sided view. From the company’s perspective, it should commit resources to improving the quality of the services and generate awareness of the importance of payments for maintenance. From the customers’ perspective, they should consider that it is not only illegal to not pay fees but also fundamental to keeping the lights on.”

## Event Notice

### Institutions for Productivity: Towards a Better Business Environment in Latin America

**Friday, April 26  
9:00 - 10:30 a.m.**

**Inter-American Dialogue**  
1155 15th St. NW, Suite 800, Washington, DC

To RSVP or view the agenda, click [here](#)

LATIN AMERICA ENERGY ADVISOR is published weekly by the Inter-American Dialogue  
Copyright © 2019

**Erik Brand**  
Publisher  
[ebrand@thedialogue.org](mailto:ebrand@thedialogue.org)

**Gene Kuleta**  
Editor  
[gkuleta@thedialogue.org](mailto:gkuleta@thedialogue.org)

**Anastasia Chacón González**  
Reporter  
[achacon@thedialogue.org](mailto:achacon@thedialogue.org)

 **THE DIALOGUE**

**Michael Shifter**, President  
**Genaro Arriagada**, Nonresident Senior Fellow  
**Sergio Bitar**, Nonresident Senior Fellow  
**Joan Caivano**, Director, Special Projects  
**Michael Camilleri**, Director, Peter D. Bell Rule of Law Program  
**Kevin Casas-Zamora**, Nonresident Senior Fellow  
**Ariel Fiszbain**, Director, Education Program  
**Peter Hakim**, President Emeritus  
**Claudio Loser**, Senior Fellow  
**Nora Lustig**, Nonresident Senior Fellow  
**Margaret Myers**, Director, Asia and Latin America Program  
**Manuel Orozco**, Director, Migration Remittances & Development  
**Jeffrey Puryear**, Senior Fellow  
**Tamar Solnik**, Director, Finance & Administration  
**Lisa Viscidi**, Director, Energy Program  
**Denisse Yanovich**, Director, Development and External Relations

**Latin America Energy Advisor** is published weekly, with the exception of some major U.S. holidays, by the Inter-American Dialogue  
1155 15th Street NW, Suite 800  
Washington, DC 20005 **Phone:** 202-822-9002

[www.thedialogue.org](http://www.thedialogue.org)

ISSN 2163-7962

Subscription Inquiries are welcomed at  
[ebrand@thedialogue.org](mailto:ebrand@thedialogue.org)

The opinions expressed by the members of the Board of Advisors and by guest commentators do not necessarily represent those of the publisher. The analysis is the sole view of each commentator and does not necessarily represent the views of their respective employers or firms. The information in this report has been obtained from reliable sources, but neither its accuracy and completeness, nor the opinions based thereon, are guaranteed. If you have any questions relating to the contents of this publication, contact the editorial offices of the Inter-American Dialogue. Contents of this report may not be reproduced, stored in a retrieval system, or transmitted without prior written permission from the publisher.