

AN ONL COMPANY

The UPM Market Informer



JULY, 2020

Inside This Issue

UPM Lasers
Surcharge Update
Medical Mfg. Reshoring
Semiconductor R&D Push
Defense Production Act
FIRSTCUT+® Processing

Pennsylvania Site Latest Gas Plant Online in Building Surge

Gas-fired power generation in the U.S. remains the top source of electricity production, even as renewable energy continues to take market share. A *POWER* analysis of projects shows nearly 180 gas-fired units are either under construction or in development nationwide, with more than 2,000 gas-fired plants currently in operation.

One of the most-recent plants to come online is the \$863 million, 1,000-MW Hickory Run Energy Center near New Castle, Pennsylvania, northwest of Pittsburgh. The project's developers, including Kansas-based Tyr Energy, a subsidiary of Japan's ITOCHU Corp.; Kansai Electric Power Co.; and Siemens Financial Services, in mid-June publicly announced that the plant began commercial operations in mid-May.

"We've been going pretty steadily. It's in the market and producing electricity much of the time. This is an efficient unit, so we expect it to stay operational most of the time," Brock Shealy, vice president of Hickory Run LLC and chief administrative officer of Tyr Energy, said in a statement. "Hickory Run itself has state-of-the-art emission controls, so it's something that's going to be looked at as an important part of energy production for PJM," the regional transmission organization. Hickory Run is Tyr Energy's first greenfield power plant in the U.S. The facility sources natural gas from the Marcellus and Utica shales.

Garrick Venteicher, president and CEO of Tyr Energy, in a statement said, "Tyr Energy is proud to formally announce the commercial operation of the Hickory Run Energy Center. We are pleased to have collaborated with two world class partners, Kiewit Power and Siemens, to bring this important energy infrastructure project to completion." NAES Corp., a Tyr affiliate, will provide operations and maintenance services to the project.

Source: Power Magazine, Darrell Proctor Image: Tyr Energy

United Performance Metals supports the power generation industry. Click here to view our line card.

DID YOU KNOW?

United Performance
Metals is home to 4 laser
cutting machines; 2 fiber
lasers and 2 CO2 lasers
delivering material that is
custom cut to your exact
specifications.

UPM delivers laser cut parts with precision performance!



CALL US WITH YOUR LASER INQUIRY! 888.282.3292

sales@upmet.com

VISIT OUR WEBSITE! www.upmet.com





Surcharge Totals April - September 2020

	O		•			
	Apr	May	Jun	Jul	Aug	Sep
15-5	0.4279	0.4160	0.4464	0.4620	*	*
15-7	0.6156	0.5733	0.6263	0.6320	*	*
17-4	0.4189	0.4096	0.4386	0.4540	*	*
17-7	0.5170	0.5000	0.5405	0.5608	*	*
201	0.4106	0.4093	0.4385	0.4493	*	*
301 7.0%	0.5108	0.4952	0.5350	0.5548	*	*
302/304/304L	0.5599	0.5416	0.5846	0.6072	*	*
304-8.5%	0.5809	0.5603	0.6052	0.6292	*	*
305	0.7311	0.6958	0.7532	0.7871	*	*
309	0.7563	0.7269	0.7838	0.8177	*	*
310	1.0641	1.0068	1.0884	1.1421	*	*
316/316L	0.7767	0.7222	0.7874	0.8030	*	*
316LS/316LVM	1.0400	1.0000	1.0500	*	*	*
317L	0.9067	0.8391	0.9149	0.9270	*	*
321	0.5943	0.5700	0.6168	0.6422	*	*
347	0.9041	0.8798	0.9266	0.9520	*	*
409/409 Mod	0.1722	0.1774	0.1929	0.1929	*	*
410/410S	0.1779	0.1842	0.1996	0.1996	*	*
430	0.2103	0.2243	0.2389	0.2389	*	*
434	0.2655	0.2707	0.2908	0.2860	*	*
439	0.2172	0.2330	0.2474	0.2474	*	*
440A	0.2103	0.2243	0.2389	0.2389	*	*
2205	0.6980	0.6637	0.7179	0.7135	*	*
263	5.1666	5.2228	5.2107	4.8689	4.6223	4.5819
276	5.1098	5.1574	4.9677	4.4746	4.3545	4.5443
A286	1.4517	1.4352	1.3310	1.2250	1.1963	1.2611
330	1.8705	1.8297	1.6758	1.5422	1.5141	1.5934
400	3.4856	3.3901	3.0570	2.6813	2.6200	2.7798
455	0.6400	0.6300	0.6500	*	*	*
465	0.7600	0.7300	0.7700	*	*	*
600	3.7388	3.6428	3.3252	3.0087	2.9608	3.1118
601	3.2082	3.1306	2.8700	2.6280	2.5877	2.7129
617	5.0440	5.0724	4.9474	4.5508	4.3728	4.4409
625	5.5965	5.5849	5.3620	4.9912	4.9088	5.0677
718	5.4781	5.4381	5.2293	4.9757	4.9239	5.0456
X-750	4.2933	4.2001	3.8914	3.5856	3.5389	3.6860
825	2.4350	2.4121	2.2527	2.0533	2.0068	2.1070
HX	3.3456	3.3542	3.1887	2.8722	2.7909	2.9228
188	7.5300	6.8200	6.3500	*	*	*
CCM	9.3000	7.9400	7.0000	*	*	*
L-605	8.8000	7.9300	7.3300	*	*	*

US Agency Puts Resources into Reshoring Medical Manufacturing

Whether it's a continuation of the first wave or the start of a second wave, it's patently clear that COVID-19 is not taking the summer off. All the more reason to apply lessons learned when the pandemic first rolled across the United States and revealed startling shortages of critical medical gear and personal protective equipment (PPE), much of which is manufactured in China and other offshore locations. As a result, reshoring manufacturing and reconsidering global supply chains have taken on



a new urgency. The most recent effort to bring back manufacturing came on June 22, when the Pentagon signed a memorandum of agreement (MOA) with the U.S International Development Finance Corp. (DFC) authorizing the DFC to issue loans originating from a \$100 million pool to support projects that "create, expand, or restore domestic industrial capabilities in response to COVID-19." As outlined in an executive order by President Trump, the loans are authorized under the Defense Production Act (DPA) Title III and are funded by the CARES Act.

The DPA became law following the Korean War and authorizes the President to prioritize the manufacture of products deemed essential for national defense. "We look forward to working together with the Department of Defense and the private sector to protect the health and safety of Americans by strengthening critical supply chains at home," said DFC CEO Adam Boehler upon signing the MOA. "Increased U.S. production of strategic resources will also allow the United States to assist allies around the world," he added, referencing the origin of the DFC. Read More *Source: Plastics Today*

Lawmakers Propose Multibillion Dollar Semiconductor R&D Push



Bipartisan legislation introduced this month aims to boost domestic semiconductor production by channeling tens of billions of dollars into R&D and workforce initiatives, tax incentives, and subsidies for fabrication facilities. Titled the Creating Helpful Incentives for Producing Semiconductors (CHIPS) for America Act, the bill's lead sponsors are Sens. John Cornyn (R-TX) and Mark Warner (D-VA) and Reps. Doris Matsui (D-CA) and Michael McCaul (R-TX).

The legislation's sponsors argue that increased investments in semiconductor research and manufacturing capacity are needed in the face of dependence on and increasing competition from other countries, particularly China. In a statement, Cornyn wrote, "Semiconductors underpin nearly all innovation today and are critical to U.S. communications

and defense computing capabilities. While Texas has been a leader in manufacturing this technology and the U.S. leads the world in chip design, most of those chips are manufactured outside the United States."

The CHIPS for America Act would authorize about \$15 billion in total for an array of R&D initiatives. A National Semiconductor Technology Center sponsored by multiple agencies would conduct research and prototyping of advanced semiconductors in partnership with the private sector, with a recommended budget of \$3 billion stretched over 10 years. An Advanced Packaging National Manufacturing Institute under the Department of Commerce would be funded at a recommended \$5 billion over five years with a focus on promoting standards development, public-private partnerships, and workforce training programs.

The bill would also establish a semiconductor program at the National Institute of Standards and Technology that would support a new Manufacturing USA institute dedicated to developing advanced testing, packaging, and assembly capabilities and tools to automate semiconductor machinery maintenance. The bill recommends \$30 million annually over the next five years for the institute and a further \$20 million per year to support other components of the program, such as advanced metrology research.

Read More Source: American Institute of Physics

Trump Invokes Defense Production Act to Produce Hypersonic Missile Parts, Space Launch System

On Wednesday, Trump invoked the Defense Production Act of 1950, using the measure to direct civilian industry's production of hypersonic weapons components.

"I hereby determine, pursuant to section 303(a)(5) of the Act, that the industrial base production capability for ultra-high and high temperature composites for hypersonic, strategic missile, and space launch systems is essential to the national defense," Trump said in the directive.

"Without Presidential action under section 303 of the Act, United States industry cannot reasonably be expected to provide the production capability for ultra-high and high temperature composites for hypersonic, strategic missile, and space launch systems adequately and in a timely manner," the order continues. "Further, purchases, purchase commitments, or other action pursuant to section 303 of the Act are the most cost-effective, expedient, and practical alternative method for meeting the need for this critical capability."



While Russia and China have developed the Mach 5-capable weapons, the US does not yet have an operational hypersonic weapon. The missiles are so fast and maneuverable, they are believed to be invulnerable to anti-air defenses and very difficult to spot through traditional ballistic missile detection methods.

Last month, after Trump boasted of a "super duper missile" under development, Pentagon spokesman Jonathan Hoffman tweeted the US was "working on developing a range of hypersonic missiles to counter our adversaries."

While the Hypersonic Conventional Strike

Weapon (HCSW) was canceled in February in a budget battle, its developer, Lockheed Martin, is pushing ahead with another hypersonic weapon, the AGM-183A Air-Launched Rapid Response Weapon (ARRW).

Throughout the national crisis of the COVID-19 pandemic, Trump had used the Defense Production Act to direct civilian industries in the production of necessary medical equipment, such as swabs, ventilators, masks and other protective gear. On June 13, 2017, Trump also invoked the Defense Production Act, saying that "critical technology items affecting aerospace structures and fibers, radiation-hardened microelectronics, radiation test and qualification facilities, and satellite components and assemblies are critical to national defense." *Source Sputnik News, Photo Sputnik/Evgeny Biyatov*

When you think "Value-Add", think United Performance Metals. With FIRSTCUT+ ® Processing Services that are second to none, UPM will give your business an edge.

Our experienced sales team can find the materials you've been looking for. Get the products you need including first stage machining.

Don't just settle for metal. Let United Performance Metals give you more. www.upmet.com 888.282.3292 sales@upmet.com

