

## **EFFICIENTLY OPERATING ENERGY-LIMITED WIRELESS NODES**

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We consider a node in a multi-hop wireless network that is responsible for transmitting messages in a timely manner while being prudent about energy consumption. The node makes distributed decisions based on local information such as queue lengths of packets in input buffers, available energy and environmental conditions. The decisions include scheduling packets on the output buffers that would be transmitted at the next opportunity. We discuss stability issues, characterize optimal policies and present numerical examples to illustrate our findings.