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17-07020

Public Utilities Commission of Nevada
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BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

Investigation and rulemaking to implement the provisions of SB 65 (2017).)
Docket No. 17-07020)
_____)

JOINT SUPPLEMENTAL REPLY COMMENTS OF WESTERN RESOURCE ADVOCATES, ENVIRONMENTAL DEFENSE FUND, AND INSTITUTE FOR POLICY INTEGRITY

Western Resource Advocates (“WRA”), the Environmental Defense Fund (“EDF”), and the Institute for Policy Integrity (“Policy Integrity”) submit the following Supplemental Reply Comments in response to questions from Commissioner Pongracz and others during the October 18, 2017 workshop. The Commissioner and others had asked for more detail on other states’ use of the Interagency Working Group’s (“IWG”) Social Cost of Carbon (“SCC”).

As mentioned in our joint reply comments, several other states have begun using the SCC as developed by the federal Interagency Working Group (IWG) in 2010, and updated in 2013, 2015, and 2016, as the best available estimate of the societal costs of carbon emissions.¹ A number of these states, including Colorado, Illinois, Minnesota, Maine, and New York, have all begun using the IWG’s estimate in energy-related analysis, recognizing that the SCC reflects the best available science and economics and is therefore the best available estimate of the marginal economic impact of carbon emission reductions. Many of these state statutes, regulations and Public Utility Commission orders include specific reference to IWG documents such as the 2016 Technical Update, consistent with the proposed regulatory definition of “Social Cost of Carbon” offered by WRA, EDF, and Policy Integrity.

¹ ILIANA PAUL ET AL., INSTITUTE FOR POLICY INTEGRITY, THE SOCIAL COSTS OF GREENHOUSE GASES AND STATE POLICY 9-12 (2017), available at http://policyintegrity.org/files/publications/SCC_State_Guidance.pdf.

1 **Colorado**

2 Colorado provides a recent example of use of the IWG’s estimate. In March 2017, the
3 Colorado Public Utilities Commission ordered that the Public Service Company of Colorado take
4 into account the social costs of carbon² in its Electric Resource Plan (“ERP”).³ ERPs include
5 information on costs associated with generation resources, as well as alternatives. The Colorado
6 PUC had considered externalities, like public health effects, in other ERP proceedings, and has
7 authority under §40-2-123(1)(b), C.R.S. to include such considerations in resource planning.⁴

8 The Colorado PUC directed the utility to model a sensitivity case in its resource plan
9 using the IWG’s central estimate of the social cost of carbon—starting at \$43 per ton in 2022 and
10 increasing to \$69 per ton in 2050.⁵ In its decision, the Commission noted that by modeling these
11 social costs of carbon, “we can test the robustness of the portfolios and assess the impact to
12 customers of a broader range of costs from carbon emissions.”⁶ The Commission also found that
13 the IWG estimate “is a reasonable quantification of the potential cost of externalities for the
14 purpose of [resource plan] model portfolios.”⁷

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20 ² We use the term “social costs of carbon” to refer generally to the concept of a monetization of the harm from
each ton of carbon dioxide emissions, with the 2016 IWG report comprising the best available estimate of this
value.

21 ³ Colorado PUC, Decision No. C17-0316, In the Matter of the Application of Public Service Company of
Colorado for Approval of its 2016 Electric Resource Plan, Proceeding No. 16A-0396E, *available at*
https://www.dora.state.co.us/pls/efi/efi_p2_v2_demo.show_document?p_dms_document_id=863402.

22 ⁴ See §40-2-123(1)(b), C.R.S. (“The commission may give consideration to the likelihood of new environmental
regulation and the risk of higher future costs associated with the emission of greenhouse gases such as carbon
dioxide when it considers utility proposals to acquire resources.”).

23 ⁵ Colorado PUC, Decision No. C17-0316, at 30, In the Matter of the Application of Public Service Company of
Colorado for Approval of its 2016 Electric Resource Plan, Proceeding No. 16A-0396E.

24 ⁶ *Id.*

⁷ *Id.*

1 **Illinois**

2 Illinois has recently used the IWG’s estimate in its “zero emissions credit” (“ZEC”)
3 policy. In late 2016, the state legislature passed a comprehensive energy bill, which included
4 provisions for valuing the social benefits of emissions-free energy.⁸ The statute defined the price
5 for each ZEC as “in an amount that equals the Social Cost of Carbon,” subject to a price
6 adjustment if the price exceeds a threshold.⁹ The statute then based the “Social Cost of Carbon”
7 on the IWG’s central estimate (the “U.S. Interagency Working Group on Social Cost of Carbon's
8 price in the August 2016 Technical Update using a 3% discount rate”), adjusted for inflation.¹⁰

9 The U.S. District Court for the Northern District of Illinois recently upheld Illinois’s ZEC
10 program against preemption and dormant commerce clause claims.¹¹

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12 **Maine**

13 Maine enacted the Act to Support Solar Energy Development in Maine during its 2014
14 legislative session.¹² Section 1 of the Act states that it is “in the public interest to develop
15 renewable energy resources, including solar energy, in a manner that protects and improves the
16 health and well-being of the citizens and natural environment of the State while also providing
17 economic benefits to communities, ratepayers and the overall economy of the State.”¹³ Section 2
18 of the Act instructs the Public Utilities Commission to determine the value of distributed solar
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22 ⁸ Future Energy Jobs Bill (SB 2814), 220 ILCS 5/20-135 new

23 ⁹ Future Energy Jobs Bill (SB 2814), 220 ILCS 5/20-135 new, at 135, *available at*
<http://www.ilga.gov/legislation/99/SB/PDF/09900SB2814enr.pdf>

24 ¹⁰ *Id.* at 135-36.

¹¹ *Village of Old Mill Creek v. Star*, Case No. 17-cv-1163, Memorandum Opinion and Order (July 14, 2017),
available at <https://statepowerproject.files.wordpress.com/2017/02/il-zec-decision.pdf>

¹² Maine P.L. ch. 562 (Apr. 24, 2014) (codified in part at 35-A M.R.S.A. §§ 3471-3474).

¹³ *Id.* at § 3472(1).

1 energy generation in the State, including “the value of the reduced environmental impacts of the
2 energy.”¹⁴

3 Maine’s Public Utilities Commission used the IWG’s estimate to make this calculation
4 for carbon emissions.¹⁵ Because carbon costs are already partially embedded in existing energy
5 valuation as a result of carbon emissions caps under the Regional Greenhouse Gas Initiative, the
6 net social cost of carbon is calculated by subtracting the embedded carbon allowance costs from
7 the IWG’s estimate. The Maine Public Utilities Commission uses the IWG’s “central” 3-percent
8 discount rate estimate.¹⁶

10 **Minnesota**

11 Minnesota provides another example. The Minnesota Public Utilities Commission is
12 statutorily mandated to consider externalities for all proceedings. In particular, the commission
13 “shall, to the extent practicable, quantify and establish a range of environmental costs associated
14 with each method of electricity generation. A utility shall use the values established by the
15 commission in conjunction with other external factors, including socioeconomic costs, when
16 evaluating and selecting resource options in all proceedings before the commission, including
17 resource plan and certificate of need proceedings.”¹⁷

18 The commission established interim cost values in 1994 and, after a contested case
19 proceeding, final cost values in 1997: a range from 30 cents to \$3.10 per short ton, later updated

21 ¹⁴ *Id.* at Sec. 2(1).

22 ¹⁵ See Maine Public Utilities Commission, Value of Solar Study,
23 http://www.maine.gov/mpuc/electricity/elect_generation/valueofsolar.shtml; MAINE PUBLIC UTILITIES
24 COMMISSION, MAINE DISTRIBUTED SOLAR VALUATION STUDY 35 (2015), available at
[http://www.maine.gov/mpuc/electricity/elect_generation/documents/MainePUCVOS-
FullRevisedReport_4_15_15.pdf](http://www.maine.gov/mpuc/electricity/elect_generation/documents/MainePUCVOS-FullRevisedReport_4_15_15.pdf).

¹⁶ See *id.*

¹⁷ 2016 Minnesota Stat. § 216B.2422 subd. 3 (enacted 1993).

1 to between 44 cents and \$4.53 per short ton with inflation. In 2014, after environmental advocacy
2 groups filed a motion requesting that the Minnesota Public Utility Commission update these
3 figures, the commission referred the issue to the Office of Administrative Hearings to assess how
4 to value externalities, including whether the state should use the IWG's estimate.¹⁸

5 The Administrative Law Judge who reviewed the matter recommended that "the
6 Commission adopt the [IWG's] Federal Social Cost of Carbon as reasonable and the best
7 available measure to determine the environmental cost of CO₂, establishing a range of values
8 including the 2.5 percent, 3.0 percent, and 5 percent discount rates" ¹⁹ The decision to use
9 the federal IWG modeling, with some adjustments,²⁰ was recently adopted by the Commission,
10 and the Minnesota PUC will use a range of \$9.05 to \$43.06 per short ton by 2020. The
11 commission will use these values in evaluating and selecting resource options in all commission
12 proceedings, including resource planning and other resource acquisition or diversification
13 proceedings.

17 ¹⁸ *Id.* at 4.

18 ¹⁹ In the Matter of the Further Investigation into Environmental and Socioeconomic Costs Under Minnesota
Statutes Section 216B.2422, Subdivision 3, Office of Administrative Hearings Report at 123-24, OAH 80-2500-
31888/ MPUC E-999/CI-14-643 (Apr. 15, 2016), *available at* [https://mn.gov/oah/assets/2500-31888-
19 environmental-socioeconomic-costs-carbon-report_tcm19-222628.pdf](https://mn.gov/oah/assets/2500-31888-environmental-socioeconomic-costs-carbon-report_tcm19-222628.pdf).

20 ²⁰ In particular, Minnesota has decided to adjust the IWG's estimates by using a range between the IWG's
"central" 3-percent estimate and a lower bound that uses a 5-percent discount rate and a shortened timeline of
100 years. *See* Andrew Moratzka, MN PUC Establishes New Environmental Costs for Use in All Proceedings,
21 Renewable+Law Blog (July 27, 2017), [http://www.lawofrenewableenergy.com/2017/07/articles/energy-
22 policy/mn-puc-establishes-new-environmental-costs-for-use-in-all-proceedings/](http://www.lawofrenewableenergy.com/2017/07/articles/energy-policy/mn-puc-establishes-new-environmental-costs-for-use-in-all-proceedings/); Compliance Filing, Great
River Energy, Minnesota Power, and Otter Tail Power Company, MPUC Docket No. E999-CI-14-643, at 2 ¶ 3
(Aug. 3, 2017),
23 [https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={E0
A0A95D-0000-C11B-8DAC-4C246B328F38}&documentTitle=20178-134494-01](https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={E0A0A95D-0000-C11B-8DAC-4C246B328F38}&documentTitle=20178-134494-01). The written order is still
forthcoming, as of November 17, 2017. Contrary to the Minnesota PUC's approach, uncertainty does not
support shortening the time horizon for the SCC. *See* ILIANA PAUL ET AL., INSTITUTE FOR POLICY INTEGRITY,
24 THE SOCIAL COSTS OF GREENHOUSE GASES AND STATE POLICY 20 (2017), *available at*
http://policyintegrity.org/files/publications/SCC_State_Guidance.pdf.

1 **New York**

2 New York’s Clean Energy Standard and accompanying Zero Emissions Credit (“ZEC”)
3 take into account the SCC in calculating the value of using emission-free nuclear power, rather
4 than carbon-emitting fossil fuel power.²¹ The New York Public Service Commission’s program
5 is designed to compensate nuclear plants based directly on the value of the carbon-free attributes
6 of their generation.²² The program follows from the governor’s clean energy plan, for which the
7 state Public Service Commission is required to take reasonably consistent actions.²³

8 The commission recognized that the IWG’s estimate is the “best available estimate of the
9 marginal external damage of carbon emissions.”²⁴ It then designed the ZEC based upon the
10 difference between the average April 2017 through March 2019 projected SCC, as published by
11 the IWG in July 2015, and a fixed baseline portion of the cost that is already captured in the
12 market revenues received by the eligible nuclear facilities under RGGI.²⁵ The New York Public
13 Service Commission uses the IWG’s estimate, with a “central” 3-percent discount rate estimate.²⁶
14 This approach was upheld in June 2017 by the United States District Court for the Southern
15 District of New York.²⁷

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19 ²¹ See Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, New York Public
Service Commission Case No. 14-M-0101, Institute for Policy Integrity Comments on Staff White Paper on
Benefit-Cost Analysis in the Reforming Energy Vision Proceeding, Filing No. 447, at 22 (Aug. 21, 2015).

20 ²² Denise Grab & Burcin Unel, *New York’s Clean Energy Standard Is a Key Step Toward Pricing Carbon
Pollution Fairly*, UTILITY DIVE (Aug. 18, 2016), available at <http://www.utilitydive.com/news/new-yorks-clean-energy-standard-is-a-key-step-toward-pricing-carbon-pollut/424741/>.

21 ²³ See New York Energy Law § 6-104(5)(b); Proceeding on Motion of the Commission to Implement a Large-
Scale Renewable Program and a Clean Energy Standard, New York Public Service Comm’n Case No. 15-E-
0302, Order Establishing a Clean Energy Standard 22 (Aug. 1, 2016).

22 ²⁴ Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy
Standard, New York Public Service Comm’n Case No. 15-E-0302, Order Establishing a Clean Energy Standard
23 131, (Aug. 1, 2016).

24 ²⁵ *Id* at 129.

²⁶ New York State Department of Public Service’s Staff White Paper on Benefit-Cost Analysis in the Case No. 14-
M-0101, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision

²⁷ Coalition for Competitive Electricity et al v. Zibelman et al (S.D.N.Y., Jul. 27, 2017).

1 CERTIFICATE OF MAILING

2 Docket No. 17-07020

3 I hereby certify that I have on this date served the foregoing document upon all parties of
4 record in this proceeding by electronic mail to the recipient's current electronic mail address,
5 facsimile, or mailing a true copy thereof, properly addressed with postage prepaid or forwarded
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