

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE)
APPLICATION OF DAKOTA) HP14-002
ACCESS, LLC FOR AN ENERGY)
FACILITY PERMIT TO CONSTRUCT)
THE DAKOTA ACCESS PIPELINE)
PROJECT)

DIRECT TESTIMONY OF

JOEY MAHMOUD

ON BEHALF OF

DAKOTA ACCESS, LLC

DAKOTA ACCESS EXHIBIT 2

July 6, 2015

1 **Q. Please state your name, present position and business address.**

2 A. My name is Joey Mahmoud. I am the Vice President of Engineering of Dakota Access,
3 LLC (“Dakota Access”), the Applicant in this proceeding, and Senior Vice President of
4 Engineering of Energy Transfer Partners, L.P. (“ETP”). My business address is 1300 Main
5 Street, Houston, Texas, 77002.

6 **Q. What are your duties and responsibilities as Vice President of Engineering of**
7 **Dakota Access and Senior Vice President of Engineering of ETP?**

8 A. For Dakota Access, I am responsible for the overall technical development and execution
9 of the Dakota Access Pipeline Project (the “Project”) as it relates to non-commercial items and I
10 am ultimately responsible for the installation and preparation of the Project to go into operations.
11 This includes the day-to-day management of the technical professionals and experts to accurately
12 and timely execute the Project from concept to design to construction and ultimately to
13 operations of the facilities.

14 As Senior Vice President of Engineering for ETP, my role is similar in scope, but broader
15 in concept. My responsibilities include the non-commercial development and execution of ETP’s
16 larger or more complex projects from concept to operations.

17 **Q. Please describe your educational and professional background.**

18 A. I received a Bachelors of Science in Animal Science from Texas A&M University in
19 1993 and a Masters of Agriculture in Rangeland Ecology and Management (Ecosystem
20 Management) with an emphasis in Rangeland and Wetland Ecology Management from Texas
21 A&M University in 1996. My professional experience is centered on the transportation and
22 logistics of moving energy related products across the United States and project management.
23 Throughout my career, my emphasis has been in project management and execution, and

24 leadership of projects for successful execution and deployment of development capital into
25 energy infrastructure projects.

26 When I first began at Energy Transfer, I was Vice President of Regulated Projects, then
27 Vice President of Engineering and now Sr. Vice President of Engineering Major Projects. In
28 each of these positions, my responsibilities were for the development and execution of capital
29 projects from concept or inception to operations.

30 Prior to Dakota Access and Energy Transfer, I worked for an engineering and
31 environmental consulting firm called PBS&J where my responsibilities included the routing and
32 siting of energy infrastructure facilities and projects and the permitting and construction of those
33 facilities and running a business unit within the consulting firm titled the "Energy Division." My
34 tasks were to manage, develop, and execute the energy related projects the firm had been hired to
35 execute.

36 Following PBS&J, I worked at Cheniere Energy where I was the Vice President of
37 Regulatory and Government Affairs. I was the corporate officer responsible for the day to day
38 execution of the company's regulatory and environmental programs, compliance and project
39 oversight and execution. Part of my responsibilities also included execution of the company's
40 special projects and philanthropy program.

41 **Q. Have you previously submitted or prepared testimony in this proceeding in South**
42 **Dakota?**

43 A. No.

44 **Q. What is the purpose of your direct testimony?**

45 A. I am testifying in support of Dakota Access's request for a permit pursuant to Energy
46 Conversion and Transmission Facility Act authorizing Dakota Access to construct, install,

47 operate, and maintain the South Dakota portion of the Dakota Access Pipeline, to be comprised
48 of approximately 274.5 miles of new 30-inch outside diameter crude oil pipeline from a point
49 near Herreid, South Dakota, and extending southeasterly for approximately 274.5 miles through
50 the state of South Dakota to ultimately terminate at Patoka, Illinois, where the pipeline will
51 connect with several of the existing tank farms located near Patoka, Illinois.

52 My testimony will include (i) a description of the corporate organization of Dakota
53 Access and its affiliates; and (ii) Dakota Access's request for authority to construct the Project
54 under SDCL 49-41B and ARSD 20:10:22 which includes, without limitation the purpose of the
55 facility, the estimated cost of the facility, demand for the facility, and to provide general
56 information regarding the proposed site and the process we went through to select the site. In
57 addition, I will testify regarding the potential impact this facility will have on the state and
58 communities through which it passes.

59 **Q. Can you provide a description of the corporate organization of Dakota Access and**
60 **its affiliates?**

61 A. Dakota Access, LLC is a Delaware limited liability company with its principal offices
62 at 3738 Oak Lawn Avenue, Dallas, Texas 75219. The membership interest of Dakota Access,
63 LLC is owned 75 percent by Dakota Access Holdings, LLC and 25 percent by Phillips 66
64 DAPL Holdings LLC.

65 Dakota Access Holdings, LLC is owned 100 percent by Energy Transfer Partners, L.P.
66 ("ETP"), a master limited partnership publicly traded on the New York Stock Exchange
67 ("NYSE"). Energy Transfer Equity, L.P. ("ETE"), also a master limited partnership publicly
68 traded on the NYSE, indirectly owns the general partner of ETP and certain of that
69 partnership's limited partner units. ETP owns the general partner of Sunoco Logistics Partners,

70 L.P. (“SXL”) and certain of its limited partner units. (ETE and ETP are together referred to
71 herein as “Energy Transfer”). Energy Transfer maintains its corporate headquarters at 3738
72 Oak Lawn Avenue, Dallas, Texas 75219.

73 ETP and SXL have reached an agreement in principle for the transfer to SXL of an
74 indirect 30 percent interest in Dakota Access, LLC.

75 Phillips 66 DAPL Holdings LLC is owned 20 percent each by Phillips 66 DE Holdings
76 20A LLC, Phillips 66 DE Holdings 20B LLC, Phillips 66 DE Holdings 20C LLC, Phillips 66
77 DE Holdings 20D LLC, and Phillips 66 DE Holdings Primary LLC. The five Phillips 66
78 entities are owned 100 percent by Phillips 66 Project Development Inc. Phillips 66 Project
79 Development Inc. is 100 percent owned by Phillips 66 Company. Phillips 66 Company is 100
80 percent owned by Phillips 66, a Delaware corporation. Phillips 66 maintains its corporate
81 headquarters at 3010 Briarpark Drive, Houston, Texas 77042.

82 **Q. Will the pipeline be operated by Dakota Access, LLC?**

83 A. The proposed pipeline project will be owned by Dakota Access, LLC and operated by
84 DAPL-ETCO Operations Management, LLC; and ultimately will be operated day-to-day under
85 an operating agreement by our crude oil pipeline affiliate Sunoco Logistics. Sunoco Logistics
86 currently operates the majority of the Energy Transfer family of assets crude oil pipelines. This
87 arrangement has been made to take advantage of and maximize our ability to seamlessly
88 integrate this new asset into our company umbrella to maximize the pipeline safety
89 considerations, operational consistency and overall cost efficiency. Dakota Access will rely
90 upon Sunoco’s existing crude oil operating infrastructure such as the back-end accounting
91 systems, control room, operating integrity programs as well as rely upon Sunoco’s experience
92 and overall policies and procedures.

93 **Q. Please give us an overview of the proposed pipeline.**

94 A. Dakota Access, LLC (Dakota Access), is proposing to construct the Dakota Access
95 Pipeline Project (Project). DAPL-ETCO Operations Management, LLC will operate the Project.
96 Sunoco Pipeline L. P. has been appointed as operator of the Dakota Access Pipeline on behalf of
97 DAPL-ETCO Operations Management, LLC. The overall proposed Project is a 1,172.53-mile-
98 long, 12-inch to 30-inch diameter pipeline that will connect the rapidly expanding Bakken and
99 Three Forks production areas in North Dakota to existing crude infrastructure in Illinois. The
100 project originates in the northwest portion of North Dakota and traverses southeast through
101 South Dakota, Iowa, and Illinois and terminates at the existing Patoka, Illinois hub. The pipeline
102 is proposed to transport approximately 450,000 barrels per day (bpd) initially, with an
103 anticipated capacity of 570,000 bpd or more. The Project's purpose is to move an economical
104 abundant reliable domestic supply of crude oil from the Bakken and Three Forks production area
105 in North Dakota to a crude oil market hub located near Patoka, Illinois. From the Patoka hub,
106 the crude oil will be transported by other pipelines to refineries located in the Midwest and the
107 Gulf Coast via existing and proposed pipeline infrastructure to further the U.S. goal of energy
108 independence. Approximately 274.5 miles of the 1,172.53-mile-long pipeline will be
109 constructed within South Dakota, crossing 13 counties in the eastern half of the state. The
110 Project enters South Dakota in Campbell County approximately 17 miles east of the Missouri
111 River, and continues southeast through McPherson, Edmunds, Faulk, Spink, Beadle, Kingsbury,
112 Miner, Lake, McCook, Minnehaha, Turner, and Lincoln counties. The Project crosses the Big
113 Sioux River approximately 14 miles south of Sioux Falls, and continues in a southeast direction
114 through Iowa. One pump station is located within South Dakota, approximately seven miles
115 southeast of Redfield in Spink County.

116 **Q. What is the estimated cost of the facility?**

117 A. The cost of constructing the entire 1,172.53-mile-long pipeline beginning in North
118 Dakota, going through South Dakota and Iowa, and terminating in Illinois is estimated to be
119 approximately \$3.8 billion. Construction of the 274.5-miles of pipeline and facilities within
120 South Dakota will cost approximately \$820 million.

121 **Q. Can you describe for us the demand for the facility?**

122 A. Dakota Access has secured binding long-term transportation and deficiency contracts
123 from multiple committed shippers to support development of the Dakota Access Pipeline with a
124 crude oil transportation capacity of approximately 450,000 bpd, with ninety percent (90%) of the
125 transportation capacity subscribed by those committed shippers and the remaining ten percent
126 (10%) of the transportation capacity reserved for walk-up shippers. Transportation service on
127 the Dakota Access Pipeline shall be provided by Dakota Access pursuant to the Interstate
128 Commerce Act and in accordance with the rules and regulations of the Federal Energy
129 Regulatory Commission for common carrier crude oil pipeline transportation service thereunder.
130 Subscriptions from committed shippers were obtained by Dakota Access in connection with an
131 initial open season that ran from March 12 to May 23, 2014, and an expansion open season that
132 commenced on September 23, 2014, and concluded in mid-December of 2014.

133 **Q. Where in South Dakota is the pipeline expected to be developed?**

134 A. The Project originates in North Dakota and enters South Dakota in Campbell County
135 approximately 17 miles east of the Missouri River. A summary of the Project facilities in South
136 Dakota is outlined in Table 11.0-1. The Project exits South Dakota as it crosses the Big Sioux
137 River approximately 14 miles south of Sioux Falls, and continues in a southeast direction
138 through Iowa. Approximately 274.5 miles of the 1,172.53-mile-long pipeline and one pump

139 station will be constructed within South Dakota. Additionally, Dakota Access will construct
 140 aboveground appurtenances including 40 mainline valves (MLVs) and three pig launcher and
 141 receiver (L/R) facilities. Contractor/staging yard (s) will also be required for the project.

Pipeline Crossing Length (miles) / Pump Station Impact Area (acres)	County	
		142
		143
29.17	Campbell	144
6.64	McPherson	145
36.17	Edmunds	146
27.88	Faulk	147
36.06	*Spink	148
30.35	Beadle	149
21.97	Kingsbury	150
14.26	Miner	151
18.61	Lake	152
1.72	McCook	153
26.16	Minnehaha	154
2.15	Turner	155
23.51	Lincoln	156
36.06	Spink	157

158 Construction of the new pipeline will require a typical construction ROW width of 125 feet in
 159 uplands, 100 feet in non-forested wetlands, 85 feet in forested areas (wetlands and uplands), and
 160 up to 150 feet in agricultural areas. Following construction, a 50-foot wide permanent easement
 161 will be retained along the pipeline.

162 Where necessary, Dakota Access will utilize additional temporary workspace (ATWS) outside of
163 the construction ROW to facilitate specialized construction procedures, such as horizontal
164 directional drills (HDDs); railroad, road, wetland, waterbody, and foreign utility line crossings;
165 tie-ins with existing pipeline facilities; areas with steep side slopes; and pipeline crossovers.
166 These ATWS will be allowed to revert to pre-existing conditions following construction
167 activities, so there will be no permanent impacts on these areas.

168 Dakota Access will utilize existing public and private roads to access the pipeline ROW and
169 aboveground facilities to the extent practicable. Existing roads utilized will include paved,
170 gravel, or pasture roads, and other conveyances. Some roads will require modification or
171 improvement to facilitate safe access for construction equipment and personnel. The Project
172 may require construction of new temporary and permanent roads to provide access to the new
173 pipeline both during construction and for future pipeline maintenance activities. Access roads
174 have not been thoroughly defined during this early design phase. Dakota Access will seek and
175 enter into road use agreements with all affected units of government.

176 **Q. How was the site for the pipeline selected?**

177 A. Dakota Access utilized a sophisticated and proprietary Geographic Information System
178 (GIS) based routing program to determine the preferred pipeline route based on multiple publicly
179 available and purchased datasets. Datasets utilized during the Project routing analysis included
180 engineering (e.g., existing pipelines, railroads, karst, and power lines, etc.), environmental (e.g.,
181 critical habitat, fault lines, state parks, national forests, brownfields, national registry of historic
182 places, etc.), and land (e.g., dams, airports, cemeteries, schools, mining, and military
183 installations, etc.). Each of these datasets were weighted based on the desire to co-locate with
184 certain features (low values) and the risk of crossing, or desire to avoid others (higher the risk,

185 the higher the value), while minimizing overall length of the route. The GIS program utilized the
186 weighted datasets to produce the preferred baseline route. For example, the existing pipelines
187 dataset was assigned the lowest value so that the routing tool followed existing pipelines to the
188 extent possible to minimize potential impacts. An example of a high weighted feature is the
189 national parks dataset; therefore the GIS routing program excluded any national parks from the
190 preferred pipeline route to avoid impacts to these federal lands.

191 The baseline centerline route was the output of the GIS routing analysis that was
192 completed during the fatal flaws phase of the Project, and the basis of further investigation. As
193 the Project moved into the design phase, coordination with agencies within states crossed by the
194 Project advanced, survey data collection commenced, landowners were engaged, and additional
195 datasets were collected. These more focused datasets were then utilized to incorporate reroutes
196 as needed to optimize the route.

197 The proposed pipeline route has been modified in multiple locations for constructability
198 issues and various other reasons including avoidance of Well Head Protection/HCAs, U.S. Fish
199 and Wildlife Service (USFWS) easements, environmental features such as wetlands and
200 waterbodies, cultural resource sites, incompatible land uses (e.g., recently expanded quarries),
201 home/farm sites, buildings, irrigation systems, power poles/towers and other structures, trees
202 planted for windbreaks, and property corners. Route modifications were made through a process
203 that included detailed review of recent aerial imagery, actual site visits, the existing datasets, and
204 helicopter reconnaissance as warranted.

205 **Q. How does the project categorize route modification?**

206 There are three basic categories of route modifications including, realignments, minor reroutes,
207 and major reroutes.

208 Realignments are small changes in the pipeline route resulting in a change in centerline location
209 of less than 150 feet. Realignments are fully within the 400-foot environmental/cultural survey
210 corridor and do not require additional survey efforts if surveys were already complete at the time
211 of realignment. To date, there have been a total of 92 realignments constituting a total length of
212 35.6 miles of route modification.

213 Minor reroutes are changes in the pipeline route of greater than 150 feet from the original
214 centerline and therefore require some additional environmental/cultural survey coverage if
215 surveys were completed prior to development of the reroute. Minor reroutes are relatively short
216 and typically do not involve new landowners. There have been a total of 37 minor reroutes with
217 a total length of 28.0 miles.

218 Major reroutes are more extensive route modifications over many miles and involving multiple
219 new landowners. Major reroutes typically require additional environmental/cultural survey
220 coverage. Presently, there has been three major reroutes with a total length of 55.1 miles. The
221 two most recent reroutes, due to identification late in the route development process are depicted
222 in the maps and tables, but are not incorporated into the Project MPs. The Spink County reroute
223 is identified with an “A” before the MPs, while the Turner and Lincoln counties reroute is
224 identified with a “B”. At this point in time, all reroutes depicted in Exhibit A are considered the
225 proposed route.

226 **Q. How would you describe your assessment of the proposed route?**

227 A. The currently proposed route most closely meets the objectives of the Project, while
228 minimizing potential impacts to the environment and maintaining the health and safety of the
229 public. Additional route modifications will continue through permitting and land acquisition
230 processes to further reduce environmental impacts and reduce the need for eminent domain.

231 **Q. Have you assessed the potential impacts of the facility on the community?**

232 A. Yes. The following information identifies the effects of construction and operation of the
233 Project on the community, taxes, agriculture, population, transportation, and cultural resources.

234 The following discussion includes potential impacts on commercial and industrial sectors,
235 housing, land values, labor market, health facilities, energy, sewage and water, solid waste
236 management facilities, fire protection, law enforcement, recreational facilities, schools,
237 transportation facilities, and other community and government facilities or services.

238 **Q. What are the expected impacts to the commercial and industrial sectors?**

239 A. The local economies are anticipated to benefit from temporary hiring of local employees
240 and from the influx of non-local construction workers. The South Dakota portion of the Project
241 area is anticipated to cost \$820 million, approximately \$486 million of this total (59 percent) will
242 result in direct spending in the South Dakota economy. Economic benefits to local commercial
243 businesses are anticipated to increase through the sales of food, lodging, services, and goods that
244 will be generated by the temporary non-local work force. Dakota Access will purchase goods,
245 including construction materials and other supplies for the Project from local businesses. Local
246 purchases for construction will include consumables, fuel, equipment maintenance, equipment
247 rental, space leasing, miscellaneous construction-related materials such as office supplies, and
248 some medical/dental needs. The direct spending within the state will cause indirect and induced
249 spending of \$168 million and \$186 million. The total impact on the South Dakota economy will
250 be \$836 million increase in production and sales.

251 The Project will not result in operation impacts to the commercial sector. Construction and
252 operation impacts to the industrial sector are not anticipated.

253 **Q. What is the expected impact to the housing market?**

254 A. It is expected that most non-local Project workers will use temporary housing, such as
255 rental units, hotels, motels, campgrounds, and recreational vehicle parks. In the South Dakota
256 counties that the pipeline corridor crosses, there are approximately 2,500 available rental units,
257 4,700 motel rooms, and 1,900 campground/recreational vehicle spaces. These accommodations
258 are all within approximately 10 to 40 miles of the pipeline corridor. During the construction
259 months between February and August 2016, it is estimated that up to approximately 1,448
260 pipeline construction personnel will be in South Dakota. It is anticipated that most of the
261 temporary workers will seek housing in the more populated, service-oriented towns located
262 within a reasonable commuting distance to the work site.

263 **Q. Will Dakota Access use local labor?**

264 A. It is anticipated that 10-12 permanent employees will be hired in South Dakota.
265 Approximately 724 construction personnel (Dakota Access employees, contractor employees,
266 construction inspection staff, and environmental inspection staff) are anticipated to be associated
267 with each construction spread. The current construction plan involves two large construction
268 spreads in 2016 in South Dakota, for a total of 1,448 construction personnel. Project
269 construction will result in more than 7,100 additional job-years of employment with an
270 approximate \$303 million increase in labor income. Dakota Access expects that its construction
271 contractors will hire temporary construction personnel from the local communities where
272 possible. It is estimated that up to 50 percent of the total construction work force could be hired
273 locally, with the remaining portion consisting of non-local personnel.

274 The net economic effect on local communities should be positive for the duration of the
275 construction period. Construction of the Project will result in short-term benefits to the local
276 communities.

277 **Q. What do you anticipate the impacts will be to health facilities?**

278 A. Local healthcare facilities will provide healthcare services to Dakota Access workers
279 during the construction and operation phases of the Project. Dakota Access' health and safety
280 policies and procedures should limit the utilization of local health facilities during the temporary
281 influx of non-local construction workers during Project construction. Due to the limited number
282 of permanent employees required for operations, no effect on health services and facilities are
283 anticipated during operation of the Project.

284 **Q. What will be the impact on local energy facilities?**

285 A. Existing (hotels, offices, etc.) and portable facilities (along the ROW) and the local
286 communities should not see any impact on their public utilities as a result of the Project. No
287 significant effects from operation of the Project are anticipated.

288 **Q. What will be the impact on local sewage and water facilities?**

289 A. Construction of the Project will generate non-hazardous pipeline construction wastes
290 including human waste, trash, pipe banding and spacers, waste from coating products, welding
291 rods, timber skids, cleared vegetation, stumps, rock and all other miscellaneous construction
292 debris. All waste, which contains (or at any time contained) oil, grease, solvents, or other
293 petroleum products will be segregated for handling and disposed of in accordance with federal
294 and state regulations.

295 **Q. Does the project anticipate impacts to solid waste management facilities?**

296 A. All trash will be removed from the construction ROW on a daily basis unless otherwise
297 approved or directed by Dakota Access. Minor vegetation, rock and other natural debris will be
298 removed from the construction ROW by the completion of clean-up. All trash and wastes will
299 be removed from every construction area when work is completed at each location. All waste

300 materials will be disposed at licensed waste disposal facilities.

301 All drill cuttings and drilling mud will be disposed at an approved location. Disposal options

302 may include spreading over the construction ROW in an upland location approved by Dakota

303 Access, hauling to an approved licensed landfill, or other site approved by Dakota Access and in

304 accordance with applicable regulations. Human wastes will be handled and disposed of

305 exclusively by means of portable self-contained toilets during all construction operations.

306 Wastes from these units shall be collected by a licensed contractor for disposal only at licensed

307 and approved facilities.

308 Due to the above reasons, significant impacts to solid waste management during construction are

309 not anticipated. In addition, solid waste operational impacts associated with this Project are not

310 anticipated.

311 **Q. What are the expected impacts from construction and operation to fire protection**
312 **and law enforcement?**

313 A. Law enforcement agencies in the communities adjacent to the Project should not

314 experience a significant impact from the pipeline workers. All employees and contractors must

315 abide by all federal, state and local laws. If any infractions occur, the employees or contractors

316 will be subject to termination.

317 Dakota Access will work with the local law enforcement, fire departments, and emergency

318 medical services to coordinate effective emergency response.

319 Dakota Access will utilize employees and contractors as emergency responders within its initial

320 response efforts in the event of a pipeline spill. Dakota Access will be consistent with industry

321 practice and in compliance with applicable regulations relating to spill personnel. In the unlikely

322 event of a spill, the usual role of local emergency responders is to notify community members,

323 direct people away from the hazard area, and address potential impacts to the community such as
324 temporary road closings. Local emergency responders typically are trained and capable to
325 execute the roles described above without any additional training or specialized equipment.
326 Dakota Access will proactively work with emergency response agencies to provide pipeline
327 awareness education and other support. Dakota Access will implement a comprehensive public
328 awareness program, consistent with all company pipelines in the U.S. This program will
329 commence in advance of the Project in-service date (estimated as October 2016). The purpose of
330 the public awareness program is to inform key members of the public of the location of Dakota
331 Access facilities and activities to protect the public from injury, what to do if an emergency
332 occurred, protect or minimize effects on the environment, protect Dakota Access facilities from
333 damage by the public, and provide an opportunity for on-going public awareness.
334 Dakota Access' public awareness program follows National Preparedness for Response Exercise
335 Program Guidelines developed by the U.S. Coast Guard and adopted by the Pipeline and
336 Hazardous Materials Safety Administration (PHMSA), the Bureau of Ocean Energy
337 Management, Regulation and Enforcement, and the EPA. Participation in this program ensures
338 that Dakota Access meets all federal requirements mandated by Oil Pollution Act of 1990.

339 **Q. What will be the expected impacts to recreation from construction and operation?**

340 A. South Dakota has extensive recreational opportunities including fishing, boating, hunting,
341 hiking, camping, biking, and bird watching. The most heavily used areas will most likely occur
342 where public access exists. The Project does not cross any federal or state owned wildlife lands;
343 however, construction of the Project may temporarily limit access to certain private areas used
344 for recreation. Construction of the Project may limit access to these walk-in areas and private
345 lands. In addition, hunting opportunities may be interrupted within the vicinity of construction

346 activities; however, possible access and hunting opportunity impacts will be temporary. No
347 impacts associated with the operation of the Project are anticipated. Hunting is compatible with
348 normal operation of the pipeline.

349 No impacts or limited access to any fishing or boating areas are anticipated as result of
350 construction or operation of the Project. In the unlikely event an impact should occur, it will be
351 short-term and infrequent, therefore impacts to fishing and boating is not anticipated.

352 **Q. Please describe for us the expected effect on transportation in the areas of**
353 **construction and operation?**

354 A. Transportation routes to be utilized during construction will be established through
355 consultation with state and local highway agencies as necessary. Those contacts will begin soon
356 and continue through construction. Dakota Access expects to enter into road use agreements
357 with all affected state and local highway agencies.

358 Dakota Access will seek to have the Commission set a road bond in accordance with SDCL 49-
359 41B-38.

360 The Department of Commerce and Regulation, Division of Highway Patrol has jurisdiction over
361 the federal and state highway system in South Dakota, and is responsible for issuing
362 transportation-related permits to accommodate construction vehicles and traffic. Dakota Access
363 has initiated contacts with local permitting authorities for the purpose of establishing timelines
364 for road permit approvals.

365 During construction, traffic on highways and secondary roads will be increased due to the
366 construction activities and due to the influx of construction workers. Hauling of line pipe and
367 most construction equipment will be within state road and bridge weight limits. There will be
368 isolated hauling of equipment that will require special permits for weight and/or width. There

369 may be an increased temporary demand for permits for vehicle load and width limits. The
370 primary impact will be deterioration of gravel or stone surfaced roads requiring grading and/or
371 replenishment of the surface materials. Dakota Access expects to be responsible for repairing
372 damage to roads and restoring them to pre-construction condition or as agreements with the
373 affected agencies dictate.

374 **Q. Please describe for us your expectations in terms of taxes due the state and local**
375 **governments?**

376 A. SDCL Chapters 10-13 requires that the Department of Revenue annually determine the
377 assessed value of the pipeline for ad valorem property tax purposes. Assessed value must be
378 determined using the cost, market, and income approaches to appraisal per SDCL Chapter 10-37-
379 9.1.

380 The increased economic activity that results during construction of the pipeline will generate
381 additional sales, use, gross receipts, and lodging taxes of approximately \$36 million for state
382 government, plus \$3 million for local governments. Once the pipeline goes into operation South
383 Dakota State and local governments will realize ongoing annual sales, use, and gross receipts of
384 about \$197,000. Also, during the first full year of operation the pipeline will generate an
385 estimated \$14 million in new property taxes for local governments.

386 **Q. Can you describe for us the forecast of the pipeline's impacts on agricultural?**

387 A. Impacts to pastureland and rangeland areas will result from temporarily clearing
388 vegetation in the ROW. These areas are anticipated to recover in one to three growing seasons
389 after construction is complete. Long-term or permanent impacts are not anticipated, except at
390 aboveground facility locations that will be fenced in and removed from current use.
391 Rangeland may be affected during construction by restrictions on livestock movement across

392 construction areas. Once construction is complete and the ROW has been restored, grazing and
393 livestock movement over the permanent ROW may resume. Landowners will be compensated
394 for the temporary loss of land use. Grazing practices should return to normal after vegetation is
395 re-established, therefore permanent impacts are not anticipated.

396 Access to and work on pastureland and rangeland will be in accordance with all easement
397 agreements and applicable permits and regulations.

398 Permanent impacts on agricultural production are not anticipated since the pipeline will be
399 buried deep enough to allow continued use of the land. Agricultural production across the
400 permanent ROW will be allowed to resume following final clean-up of pipeline construction.

401 Dakota Access will restore all lands equivalent to adjacent off-ROW lands and will provide
402 compensation for crop loss, diminished productivity, and other damages to farmland.

403 Reclamation and revegetation of croplands impacted by Project construction will be in
404 accordance with applicable easement agreements. Land will be recontoured to pre-existing
405 conditions as practical and disturbed structures, ditches, bridges, culverts, fences, and slopes will
406 be restored. Measures within the AIMP (Exhibit D) will be implemented to minimize potential
407 impacts to agricultural areas.

408 Access to and work on croplands will be in accordance with all applicable permits and
409 regulations.

410 **Q. Please describe your forecast of the impacts on South Dakota's population?**

411 A. Approximately 1,448 construction personnel at peak construction are anticipated for the
412 pipeline construction spreads in South Dakota. The Project construction period will be relatively
413 short in any given area and most non-local workers will not be accompanied by their families
414 during their employment, therefore should not have impact on local population.

415 During construction of the Project, there is likely to be a positive impact on income with an
416 estimated \$303 million increase in labor income. Once the pipeline has been built, the yearly
417 operations and maintenance spending will add 12 permanent jobs, approximately \$2 million in
418 labor income, and approximately \$4 million in additional production and sales to the South
419 Dakota economy.

420 During operations, the small number of potential permanent jobs suggests that the Project will
421 not have long-term impact on income, occupational distribution, or cohesion of the local
422 communities.

423 **Q. Please describe your thoughts on pipeline decommissioning.**

424 A. Sections 20:10:22:33.01 and 20:10:22:33.02 are not applicable to this Project application.
425 However, if/when decommissioning is necessary it will be done pursuant to applicable federal
426 and state laws at the time of decommissioning.

427 **Q. Does this conclude your testimony?**

428 A. Yes.

429

430 Dated this _____ day of July, 2015

431

432 _____

433 Joey Mahmoud